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D H I A

SIRE SUMMARY LIST

May 1967

AYRSHIRE, GUERNSEY, HOLSTEIN, JERSEY, BROWN SWISS,  
MILKING SHORTHORN, AND RED DANE Sires

Agricultural Research Service  
U. S. Department of Agriculture

The sire evaluations summarized in this publication are appraisals based on information about the production performance of progeny obtained by USDA's Agricultural Research Service from Dairy Herd Improvement Associations (DHIA) that are affiliated with the National Cooperative Dairy Herd Improvement Program. This program is described in detail in U.S. Department of Agriculture Handbook No. 278, "National Cooperative Dairy Herd Improvement Program Handbook," copies of which can be obtained from the Office of Information, U.S. Department of Agriculture, Washington, D. C. 20250.

The DHIA Sire Summary List is revised and updated as improved techniques are developed to furnish its members with more accurate evaluations of sires of DHIA cows.

## DHIA SIRE SUMMARY LIST MAY 1967

Ayrshire, Guernsey, Holstein, Jersey, Brown Swiss,  
Milking Shorthorn, and Red Dane Sires

### INTRODUCTION

This DHIA Sire Summary List contains information for 39 Ayrshire, 250 Guernsey, 825 Holstein, 227 Jersey, 74 Brown Swiss, 24 Milking Shorthorn, and 4 Red Dane sires and their daughters. Summaries were compiled from data received by the Animal Husbandry Research Division, ARS, to May 1, 1967.

A sire summary record is compiled for a sire when enough of his daughters have lactation data and herdmate records reported. Sires in the following categories are summarized in this publication. (1) Those for whom sufficient information was available for the first time, (2) those reported to be active in artificial insemination on January 1, 1966 or later, (3) those for whom enough additional information was available to warrant a resummary, and (4) those for whom special requests for summaries were received.

All production records used in DHIA sire summaries consist of lactation records of 305 days or less that have been standardized to a mature-equivalent (M.E.), twice-a-day milking basis. The age factors used in standardizing these records were stratified by geographical region of the United States and by season. (See Dairy Herd Improvement Letter, February 1967.) Separate adjustment factors were used for milk and milk fat. When more than one lactation is available for a cow, all records for both the daughter and her herdmates are averaged and used to represent her performance.

Incomplete records that are reported as having been terminated because the cow aborted, was culled for low production, or was sold for nondairy purposes were projected to a 305-day basis by factors that allow for breed, age, milk, and

milk fat and were used in compiling sire summaries. (See Dairy Herd Improvement Letter, August 1965.) Records that were deleted and not used in compiling summaries were (1) those coded as complete but less than 180 days in length, (2) those coded as incomplete but less than 15 days in length, (3) those estimated for two or more consecutive test periods, and (4) those initiated by abortion. However, incomplete records may not be included for cows that calved before 1959.

Currently reported lactation records were accepted into master files and used in the sire summaries only if the interval from calving date to production run date (May 1, 1967) exceeded 364 days. A lapse-time interval has been tested and shown to be effective in reducing the high incidence of incomplete records in early sire summaries. Rejected records were set aside and will be re-entered in the next appropriate sire summary.

#### COMPILATION OF SIRE SUMMARY

The herdmate, or contemporary, comparison is useful because it removes from the evaluation of a sire's breeding value complications arising from herd, year, and season-of-calving variations in production. Herd-year-seasons are based on a 5-month moving average. The appropriate herdmate average for the daughter of the sire is obtained by averaging all records of daughters of other sires calving in the herd in the same month as the daughters, in the previous 2 months, and in the succeeding 2 months (i.e., the same herd-year-season). For example, the herdmate average for a sire's daughter that calved in March is obtained by averaging the production of all cows, except her paternal sisters, that calved in that herd from January through May. All comparisons included in these summaries are on a within-breed basis.

Because the usefulness of the herdmate average is dependent in part on the number of herdmates available, the herdmates' production is adjusted to place the herdmate data of the daughters on a more comparable basis. For each individual lactation of a sire's daughter, the herdmates' average

is adjusted as follows:

$$AHMA = \text{Reg -brd-yr-sea. avg.} + \frac{N\text{HM}}{N\text{HM} + 1} (\text{HM avg. minus Reg -brd-yr-sea. avg.})$$

where AHMA = Adjusted herdmate average

Reg -brd-yr-sea. avg. = Regional breed-year-season average

NHM = Number of herdmates

HM = Herdmate average

The regional breed-year-season averages are calculated from the 2X,305-day,M.E. DHIA records of cows calving from January 1, 1950, to May 1, 1965. Three regional groupings are used for Ayrshire and Brown Swiss, four for Guernsey and Jersey, and 14 for Holstein. The averages for Milking Shorthorn, Red Dane, and Red Poll are based on all cows calving in the United States for the year-season in question. The primary cause of differences in the number of regions used for each breed was the number of available lactations. The States comprising each region are shown in table 1, of the Appendix.

The measure of breeding merit used in these summaries is the Predicted Difference. This value is the expected deviation of a bull's progeny from their herdmates in breed average herds. The Predicted Difference (PD) is computed as follows:

$$PD = \frac{\frac{Nh^2}{4 + (N-1) h^2 + \frac{4 \sum n_i (n_i - 1)}{N}}}{C^2} \left[ (Dau. Avg. - AHMA) + 0.1(AHMA - Breed Avg.) \right]$$

↓                      ↓                      ↓                      ↓                      ↓  
 Adjustment for number of daughters      Adjustment for distribution of daughters over herds      Environmental correlation      Adjustment for herd environment and number of herdmates      Adjustment for herd genetic level

where:  $N$  = Total number of progeny of the bull

$n_i$  = Number of progeny in the  $i^{\text{th}}$  herd

$h^2$  = Heritability of milk yield from paternal half-sib estimates in nationwide populations

$C^2$  = Residual environmental correlations among half-sibs in the same herd after they are expressed as deviations from herdmates

AHMA = Adjusted herdmate average; Daus. = daughters; and Avg. = average.

The value  $w_j$  will be substituted for N when some daughters have more than one record.

where:  $w_j = \frac{n_j R}{R [1 + (n_j - 1) R]} = 1.00 \text{ for one record; } 1.33 \text{ for two records; } 1.50 \text{ for three records; etc.}$

R = Repeatability of individual records  
= 0.50

$n_j$  = Number of records on the  $j^{\text{th}}$  cow

The breed average is compiled from all DHIA cows of the respective breed that calved in 1963 and 1964. These averages are shown in the following tabulation:

<u>Breed</u>	<u>Milk</u> <u>1/</u> <u>Lb.</u>	<u>Fat</u> <u>1/</u> <u>Lb.</u>	<u>Breed</u>	<u>Milk</u> <u>1/</u> <u>Lb.</u>	<u>Fat</u> <u>1/</u> <u>Lb.</u>
Ayrshire-----	10,546	426	Brown Swiss-----	11,689	477
Guernsey-----	9,153	436	Milking Shorthorn-	9,204	345
Holstein-----	13,357	487	Red Dane-----	11,397	454
Jersey-----	8,414	429	Red Poll-----	7,904	316

1/ 2X, 305-day, mature equivalent.

The precision with which a Predicted Difference will predict the true breeding merit of an individual bull, relative to other bulls of that breed, depends on many factors. The major variables that affect precision are:

- (1) Number of daughters in the summary
- (2) Number of herds in which the daughters are located
- (3) How the daughters are distributed through these herds
- (4) Number of lactations per daughter in the summary

The accuracy of predicting a bull's true breeding merit increases as additional daughters and herds are added. The more uniform the progeny are distributed through the herds represented, the more repeatable the summary becomes. Ability to measure the true daughter deviation in breed average herds increases as the number of lactations per daughter increases. Examples of Repeatability for different combinations of numbers of daughters per herd are shown in the figure 1.

The measure of precision in the Predicted Difference used in this publication is the Repeatability of the sire summaries, which is computed as follows:

$$\text{Repeatability of a sire summary} = \frac{\frac{Nh^2}{4 + (N - 1)h^2 + \frac{4 \sum n_i (n_i - 1)}{N} c^2}}{N}$$

where:  $N$  = Number of daughters in the summary. The value of  $w_j$ , as explained previously, is substituted for  $N$  when some daughters have more than one lactation.

$h^2 = 0.19$  and is the heritability of milk production as developed from nationwide samples of records.

$\frac{\sum n_i (n_i - 1)}{N}$  = The adjustment for distribution of daughters through the herds represented in the sire summary.

$n_i$  = Number of daughters in each herd. If a bull had nine daughters in herd 1, and six daughters in herd 2,  $\sum n_i (n_i - 1) = 9(8) + 6(5)$ .

$c^2 = 0.14$  and is the relationship among half-sisters calving in the same herds because of common environment and certain genetic factors not accounted for by differences among bulls.

A low Repeatability value or confidence factor, indicates that the true breeding merit of the bull involved may be appreciably different from the Predicted Difference shown for that bull in the same sire summary.

The parameters used in computing the reliability of sire summaries are based on the best research information presently available. The value of  $h^2$ , 0.19, is the same as used by USDA in the past in the equation for adjusting summaries on AI bulls,  $\frac{N}{N + 20}$ . The value of  $c^2$ , 0.14, is based on USDA research with nationwide samples of data.

It has long been known that the accuracy of projecting a lactation record is proportional to the number of days in milk.

This principle was used to adjust incomplete lactations in this DHIA Sire Summary List. The procedure is as follows:

$$\text{Adj. Dau. rec.} = \text{AHMA} + r_i \text{ (Proj. Dau. rec. minus AHMA)}$$

where:  $r_i$  = The phenotypic correlation between a record with  $i$  months in milk and a 305-day record.

Adj. Dau. rec. = Adjusted daughter record

Proj. Dau. rec. = Projected daughter record (2X, 305-day, M.E.)

AHMA = Adjusted herdmate average

The correlations were stratified by age, as follows:

	Months in Milk									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2-yr-old cows	.72	.83	.88	.92	.94	.96	.97	.98	.99	1.00
Older cows	..60	.74	.82	.86	.91	.93	.96	.98	.99	1.00

Thus, for example, a 2-year-old cow with a record of from 15 to 46 days in milk would receive only 72 percent as much weight as one that had completed a lactation. A record of 120 days or more (4 months in milk) is given practically the same weight as a complete record.

#### INTERPRETATION OF SIRE SUMMARY

The contemporary herdmate comparisons used in the USDA-DHIA Sire Summaries are especially effective in reducing environmental influences arising from herd, year, and season of calving. The primary purpose of the summaries is the use of Predicted Differences to evaluate bulls on the basis of estimated breeding value or transmitting ability for milk and butterfat yield.

Sire evaluations are based on the most reliable statistical methods available, but their usefulness for ranking bulls may be seriously limited when the Repeatability value, or "confidence factor," is less than 50 percent. When the Repeatability value is less than 50 percent the summary needs to be supplemented with additional information from the herd(s) in which the sire's daughters made their records.

Situations that are likely to cause sire summaries to represent inaccurately the true transmitting ability of the sire are (1) daughters receiving feed and management that are different from their herdmates, (2) daughters of only one or a few bulls represented among herdmates, and (3) none or few herdmates of the same age as the daughters of the bull in question.

The greater the Repeatability value, or "confidence factor," of a summary the greater the probability that the Predicted Difference reflects the true transmitting ability of the bull for milk and fat yields.

The choice between two bulls with similar Predicted Differences involves less gamble when the bull with the higher Repeatability value is selected. However, caution should be used in predicting a bull's potential based on a single mating, regardless of the Repeatability value.

Additional tabular information that supports the Summary is in the Appendix at the end of the publication.

When a bull is in an AI stud, the DHIA Sire Summary List shows sire's AI stud code or the last organization that owned the summarized sire. The list of AI organizations that have operated in the United States in recent years is shown in appendix table 2, which has been compiled from reports received by ARS, Animal Husbandry Research Division. Some organizations listed in table 2 may no longer exist but are referred to because the sires they owned are summarized. An asterisk (\*) preceding the name of an AI organization indicates that the organization has been reported as being active. The AI State and organization codes together make up the sire's stud identification number.

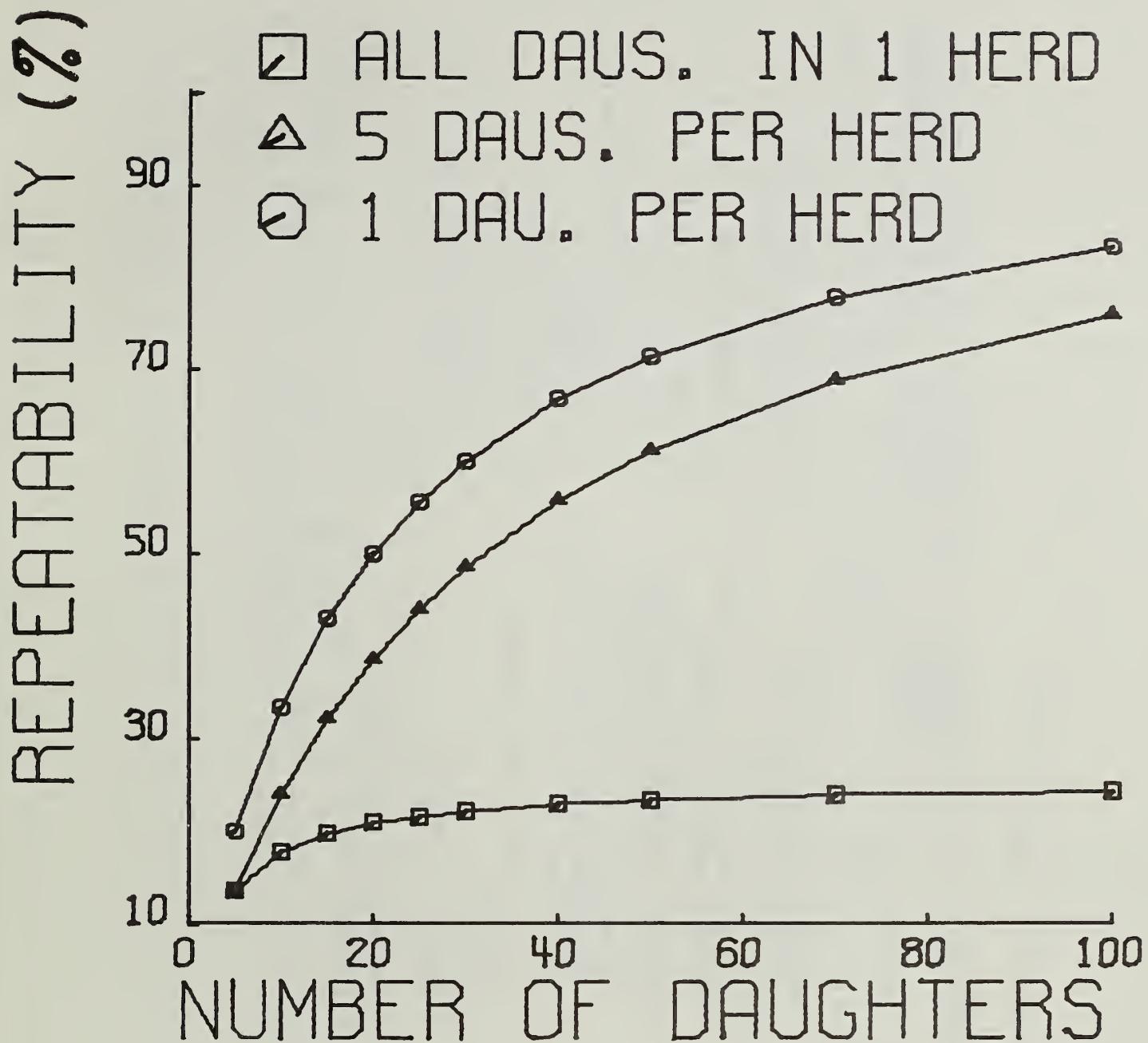


FIGURE 1

EXAMPLE SIRE SUMMARY DATA 1/

REGISTRATION DATA		DAUGHTERS				DAUGHTER AVERAGES				HERDMATE AVERAGES				REPEAT-ABILITY		PREDICTED DIFFERENCE	
A	B	C	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
1303198	VIGO ROBURKE ELVIS	*	11	57	1.47	42	3.1	15,516	3.63	563	48	15,311	558	70%	+282	+9	
D	E	F	G														
07-02-56	1024453	3906910	8-66														
H	I	J															
STUD 35-75	STATES 12	23,32,35,87,93															

**A** Registration number  
**B** Registration name  
**C** Indicates that 51 percent or more of progeny in the summary were registered  
**D** Bull's birth date  
**E** Registration no. of sire of bull  
**F** Registration no. of dam of bull  
**G** Date of previous summary  
**H** AI stud in which bull is located  
**I** Number of states in which progeny are located  
**J** The states (up to 5) having the highest number of daughters  
**K** Percent of daughters sold for beef or died in first lactation (blank if first lactation not available on 50 percent or more of progeny.)  
**L** Number of daughters having herdmates  
**M**  $\frac{\text{Number of records}}{\text{Number of daughters}}$   
**N** Number of herds in which daughters are located  
**O** Effective distribution of daughters per herd  
**P** Daughters milk, 1b.  
**Q** Daughters percent fat (M.E.)  
**R** Daughters fat, 1b.  
**S** Average number of herdmates per daughter  
**T** Herdmates milk, 1b.  
**U** Herdmates fat, 1b.  
**V** Repeatability of this summary to future summaries  
**W** Milk  
**X** Fat

1/ Pedigree information (sire, dam, and birth date) may not be available the first time a bull is summarized. If a bull is in an AI stud, the stud code is shown. A list of State and stud codes is shown on page 65.



REGISTRATION				INC	DAUGHTERS	NO	EFF	DAUGHTER			ADJUSTED		REPEATABILITY	PRE
NUMBER	NAME	OF	BULL	%	REC /	OF	DAU /	MILK	AVERAGES	HERDMATE	MILK	FAT	OF SIRE	OFF
123286	ALLAN ACRES AOAM.....*		0	0	22	1.86	2	20.0	13,281	4.35	578	9	11,761	498
01-02-59	118398	504069	5-67										27%	+435 +23
STUO	91-11	STATES	1-51											
123531	WINOROW CONCENTRATION.....*		11		76	1.14	58	1.6	11,282	3.86	435	20	11,719	465
06-18-60	79374	413404	5-67										79%	-250 -19
STUO	21-10	STATES	7-11,12,13,21,23											
123781	WINDRDW SHAMROCK.....*		11		9	1.33	2	5.0	12,086	4.12	498	8	12,243	478
01-01-61	116706	513281	5-67										24%	+3 +6
STATES	1-31													
123889	.....*		17		7	1.43	1	7.0	13,035	3.84	501	10	11,534	463
0-00		STATES	1-41										18%	+280 +7
123936	OAK RIOGE ROYAL COUNT.....*		12		25	1.12	14	2.4	11,071	3.99	442	14	10,700	431
08-01-60	94065	496832	5-67										52%	+200 +6
STUO	51-02	STATES	5-31,50,51,54,55											
124187	.....*		25		8	1.00	1	8.0	12,298	3.44	423	26	11,958	475
0-00		STATES	1-34										16%	+79 -7
125400	.....*		0		5	1.00	1	5.0	12,048	4.08	491	10	10,790	409
0-00		STATES	1-42										14%	+174 +11
126418	.....*		29		7	1.00	1	7.0	11,959	3.86	462	51	11,460	451
0-00		STATES	1-23										16%	+92 +2
126419	.....*		40		5	1.00	1	5.0	10,986	3.97	436	60	11,460	449
0-00		STATES	1-23										14%	-51 0
127268	.....*		13		8	1.00	2	5.0	11,975	4.05	485	9	11,240	429
0-00		STATES	1-42										20%	+162 +11







REGISTRATION NUMBER	NAME OF STUO	BULL STATES	INC %	DAUGHTERS NO	REC / OAU	NO OF HEROS	EFF OAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO	AVERAGES MILK	REPEATABILITY OF SIRE SUMMARY	PRE OIFF MILK FAT			
								MILK	%	FAT							
539902 MONTEREY L. KING.....*	02-20-58	496522	1097100	0	23	1.78	5	9.1	10,504	4.38	460	13	9,883	475	39%	+269	-3
540160 ROETTA ROSE MASTER-S BUO.....*	10-01-57	440558	1768707	21	63	1.57	23	7.9	11,243	4.85	545	12	11,160	541	64%	+182	+9
540203 FAIRLAWN PAMELA-S WARRIOR.....*	02-03-58	473833	1408562	3	51	1.67	9	27.4	10,470	4.50	471	37	10,354	460	38%	+90	+5
540259 RUSHCREEK SUPREME-S LAD.....*	03-06-58	475555	806273	5	21	2.00	3	15.6	13,152	4.43	582	6	11,719	542	30%	+509	+15
540627 GUERNSEY LAND FAITHFUL-S JANUS*	08-15-57	523717	1514633	7	33	2.15	9	19.1	9,924	4.57	454	47	9,707	461	36%	+98	-1
540888 PONO ACRE FARM-S F. FLICKER...	07-31-57	475548	1078459	0	19	2.21	8	6.8	11,575	4.70	544	12	10,983	520	40%	+307	+15
541009 MULHOCAWAY BUTTERFAT KING HAL.*	05-12-58	493764	1217600	12	65	1.72	38	2.4	9,618	4.86	467	14	9,443	443	76%	+156	+19
541091 MAPLE DAWN WINDSOR-S FORCE.....*	03-12-58	523127	1699957	8	29	2.34	3	13.5	11,594	4.68	543	12	10,407	510	40%	+529	+16
541674 HOLLINKNOLL 80NO-S EM8ASSAOR...*	04-19-58	446227	1245016	20	201	1.37	61	9.2	9,087	4.73	430	24	9,347	443	83%	-200	-9
542269 WILLOW SPRING SUPREME VIC.....*	03-28-58	538021	932926	10	61	1.56	32	2.6	10,282	4.71	484	15	9,646	447	74%	+508	+28
543094 MCOONALO FARMS JOLLY 8EAU.....*	07-31-58	439587	1538109	0	9	1.56	6	1.8	9,581	4.83	463	10	9,308	441	32%	+92	+7
543096 MCOONALO FARMS GOLOEN 8ART.....*	08-19-58	522990	1429477	0	8	2.50	1	8.0	12,405	4.93	612	12	12,027	592	22%	+144	+8
543158 NORTHERN HERMES.....*	10-14-58	415425	1344800	3	83	1.69	43	3.8	10,533	4.44	468	15	9,355	442	78%	+932	+21
543348 COLBYS GABRIEL.....*	06-23-58	440484	1144594	10	190	2.28	82	3.6	9,455	4.73	447	16	9,425	444	90%	+52	+3
543422 RIVERVIEW MALITA-S KING.....*	07-29-58	498590	1463957	12	74	1.59	41	2.9	9,826	4.78	470	16	10,170	485	77%	-186	-7
543818 FAIRLAWN MURIEL-S VALOR.....*	09-12-58	533507	1004019	12	223	2.16	139	2.3	10,550	4.42	466	17	9,682	454	92%	+851	+13
543819 FAIRLAWN WARRIOR-S 8ELL80Y...*	09-13-58	473833	1637823	14	45	1.49	9	23.5	10,360	4.68	485	20	9,376	435	38%	+377	+19
543853 MARGENDELL HIS MAJESTY.....*	09-10-58	528225	1660942	4	58	1.72	29	3.4	10,078	4.57	461	15	9,341	439	72%	+544	+16
544226 8AYVILLE ROYAL VIGINIAN.....*	07-24-58	449539	1567849	7	28	1.89	3	14.5	9,476	4.94	468	109	9,773	473	37%	-85	0
544916 YELLOW CREEK BUTTERFAT 8ART...*	08-30-58	496474	1260591	3	44	2.39	27	2.6	10,088	5.06	510	13	9,738	462	71%	+289	+36
544991 WYNO SAINT-S HUGO.....*	12-26-58	429156	1482000	15	217	1.83	104	3.3	9,739	4.68	456	20	9,494	452	91%	+254	+5
545150 GRAYSMARSH MAINLINES.....*	09-02-58	468032	893958	7	53	1.47	12	20.9	10,258	5.08	521	27	10,567	517	43%	-72	+5
545231 YELLOW CREEK HANOV EARL.....*	05-22-58	526747	1741218	6	18	2.33	3	14.3	11,150	5.10	569	12	10,608	529	29%	+197	+14
545327 ERWIN FARMS PRINCE SUPREME...*	11-28-58	475555	1494436	15	72	1.26	32	4.0	9,568	4.68	448	17	9,427	440	73%	+123	+6
545369 NORTHERN HERMES EMORY.....*	03-01-59	415425	1346901	0	24	1.46	7	6.7	10,088	4.73	477	43	9,755	432	43%	+168	+19
545802 FAR WEST NDRAS TREREST...*	11-17-58	453207	1687872	5	45	1.64	22	3.1	9,664	4.63	447	18	10,087	466	67%	-220	-10
545984 8AYVILLE ROYAL KING.....*	12-18-58	449539	899617	8	16	1.50	13	1.5	7,643	4.64	355	38	8,295	380	46%	-338	-13
546327 WESTERN GLOW MAY-S TRAVELER...	01-30-59	535338	1248725	0	7	1.00	3	2.7	13,099	4.31	564	18	12,211	521	22%	+260	+11
546331 WESTERN GLOW DARIMOST.....*	05-14-59	475548	1146132	8	82	1.30	46	2.7	10,702	4.74	507	15	10,052	474	78%	+579	+29



REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / DAU	NO OF HEROS	EFF DAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO MILK	AVERAGES MILK FAT	REPEATABILITY OF SIRE SUMMARY	PRE OFF MILK FAT
						MILK	%	FAT				
549511 DERRY MANOR AUGUSTUS.....* 11 C2-12-60 446983 1615756 5-67 STUD 21-10 STATES 2-21,23		50	1.26	33	2.5	10,149	4.79	486	20	9,698	459	69%
549588 WOOOACRES EMPEPOR.....* 13 09-12-59 524479 1369854 5-67 STUD 34-01 STATES 5-22,23,32,34,47		57	1.30	35	3.0	10,946	4.69	513	14	10,552	509	71%
549878 BOEHLIES HELENA PRINCE.....* 7 01-15-60 521527 1750408 5-67 STATES 1-48		15	1.20	1	15.0	9,439	5.10	481	17	9,686	464	21%
550014 HOMINY HILL ACME.....* 5 12-18-59 489007 1801354 5-67 STUD 33-21 STATES 2-23,42		20	1.45	4	8.3	13,097	4.62	605	10	12,451	603	36%
550569 COL8YS TARZAN.....* 0 11-10-59 539441 1666248 5-67 STATES 2-33,35		16	1.44	6	4.2	8,207	4.96	407	11	8,568	405	38%
550772 WESTERN GLOW MELBAS CHAMPION..* 0 09-12-59 422711 1890678 0-00 STUD 91-11 STATES 2-84,91		5	1.00	2	3.4	12,418	4.45	552	26	12,080	586	16%
550793 SPAR HILL GOVERNOR.....* 15 01-22-60 524993 1511048 5-67 STUD 33-03 STATES 7-13,15,23,51,52		29	1.24	11	7.8	11,191	4.91	549	16	12,458	601	44%
550852 DEEP LAKE FLASH-S PHILOSOPHER. 14 01-20-60 475548 1290353 5-67 STUD 41-01 STATES 1-41		21	1.33	15	2.2	9,043	4.72	427	9	9,228	441	50%
550866 LISETER SULTAN.....* 15 11-04-59 499468 1332980 5-67 STATES 3-23,72,85		37	1.14	5	16.0	8,924	4.62	412	110	10,247	471	38%
550918 WESTERN GLOW PEARLS TRAVELER..* 27 06-08-60 535338 1672901 5-67 STATES 1-91		11	1.18	2	9.1	11,754	4.78	562	11	11,739	575	21%
550919 CHEOCO JANETS KING.....* 13 04-28-60 472563 1258202 5-67 STUD 23-09 STATES 3-23,31,57		145	1.31	61	3.7	9,955	4.57	455	17	9,520	447	85%
550942 FRANCHESTER CECILIA-S BONANZA..* 12 11-08-59 496783 1204512 5-67 STUD 31-01 STATES 16-31,32,33,56,58		483	1.20	192	5.5	10,195	4.63	472	22	9,513	447	94%
550943 FRANCHESTER CECILIA-S MOOEL...* 21 01-27-60 496783 1851126 5-67 STUD 35-02 STATES 4-31,35,72,86		49	1.22	33	1.8	9,529	4.81	458	19	9,454	448	70%
551096 GUERNGOLO FLASH.....* 7 11-29-59 475548 1635000 5-67 STUD 91-11 STATES 2-41,42		29	1.38	5	14.7	10,559	4.84	511	8	9,320	466	35%
551156 U OF M G MASTER.....* 11 05-31-60 440484 1770287 5-67 STUD 41-01 STATES 1-41		9	1.44	2	7.2	10,738	4.90	526	13	10,196	484	21%
551278 WOOOACRES CORONATION CHIEF.... 0 01-14-60 425345 1450157 5-67 STATES 1-33		17	1.41	1	17.0	11,003	4.89	538	13	11,173	515	22%
551455 PRE EMINENT HERMES EMORY.... 0 12-03-59 415425 1544653 5-67 STATES 1-43		11	1.55	4	3.3	9,885	4.90	484	14	10,078	479	32%
551503 .....* 5 0-00 STATES 1-23		22	1.14	1	22.0	8,734	5.01	438	52	9,410	447	22%
551583 HOMINY HILL LYNN.....* 17 01-26-60 453762 1759681 5-67 STUD 21-10 STATES 6-12,13,14,15,16		78	1.29	50	2.5	10,663	4.73	504	16	10,471	499	79%
551846 SHAMROCK PRECISE-S PARAGON.... 32 03-10-60 496783 1199690 5-67 STUD 87-01 STATES 4-54,82,86,87		22	1.18	7	6.2	9,773	4.86	475	37	10,115	466	40%
551914 LAUXMONT MASTERPIECE.....* 19 08-07-60 456337 1517845 5-67 STUD 23-11 STATES 1-23		40	1.25	20	2.7	9,028	4.82	435	19	9,880	479	63%
551920 ROSEWOOD BEA HAZEN.....* 0 06-15-60 498183 1743437 5-67 STUD 33-01 STATES 1-33		35	1.40	13	6.0	10,265	4.80	493	12	10,018	477	53%
551921 ROSEWOOD ARISTOCRAT 8EA.....* 0 07-10-60 498183 1759580 5-67 STUD 33-01 STATES 2-33,35		9	1.22	5	2.3	11,809	4.59	542	22	11,126	532	29%
552051 .....* 33 0-00 STATES 1-23		10	1.00	1	10.0	7,156	4.88	349	14	8,501	408	18%
552135 .....* 0 0-00 STATES 1-41		8	1.00	1	8.0	7,323	4.66	341	5	10,250	517	16%
552180 RITCHIEODEAL DICTATOR-S ZORO...* 0 03-21-60 421539 1777242 5-67 STATES 1-32		15	1.53	3	7.8	11,210	4.51	506	9	10,728	500	30%
552304 .....* 0 0-00 STATES 1-33		9	1.00	2	7.2	8,228	4.86	400	17	8,897	406	19%
552390 CLEVERLANDS BUTTERFINGER.....* 8 02-24-60 459489 1733266 5-67 STATES 1-93		12	1.17	2	7.5	13,037	4.55	593	72	13,258	599	24%
552424 MAPLEWOOD ROYALIST-S BRIGADIER* 8 12-09-53 487028 968572 5-67 STUD 35-02 STATES 6-31,34,35,42,48		80	1.44	45	3.6	9,747	4.61	449	15	9,523	446	77%

REGISTRATION			INC %	DAUGHTERS NO	NO OF HEROS	EFF OAU / HERO	DAUGHTER AVERAGES MILK % FAT			ADJUSTED HEROMATE NO	AVGARES MILK FAT	REPEATABILITY OF SIRE SUMMARY	PRED OFF MILK FAT
552587 AUER N F HERMES ROYAL.....*	12	06-25-60	415425 1401494 5-67 STATES 1-16	17	1.18	2 15.1	8,667 4.98 432	18	8,918 425	23%	-61	+1	
552647 SHAMROCK PRISCILLA-S PINNACLE.*	19	05-22-60	496783 1619287 5-67 STUO 93-02 STATES 2-63,86	37	1.30	2 35.0	10,676 4.68 500	55	11,367 524	25%	-118	-3	
552738 NORBERTS BEA OEWY.....*	0	05-25-60	498183 1600002 5-67 STUO 33-02 STATES 1-33	18	1.33	8 5.2	10,309 4.66 480	16	9,609 465	38%	+284	+7	
552794 DULUTH S FASHION.....	10	12-10-60	475548 1809161 5-67 STUD 41-01 STATES 2-41,45	10	1.00	8 1.4	9,106 4.77 434	10	9,364 440	32%	-75	-1	
552896 CLEVERLANOS GENERAL ELODRAAO.*	0	06-06-60	530378 1288698 5-67 STUD 35-75 STATES 1-93	7	1.71	2 4.1	15,801 4.31 681	67	12,875 588	23%	+752	+25	
552988 .....	0		0-00 STATES 1-43	11	1.09	1 11.0	10,697 4.64 496	19	10,440 489	19%	+72	+2	
553014 .....	8		5-67 STATES 1-92	15	1.00	3 7.5	12,366 5.10 631	19	11,790 608	28%	+233	+11	
553088 GREYSTONE CHIEF.....*	8	11-14-60	425345 959742 5-67 STUO 23-11 STATES 2-21,23	13	1.15	11 1.3	9,111 4.76 434	14	9,040 427	40%	+24	+2	
553233 WYNOLA BONANZA.....	17	11-07-59	496783 1492381 5-67 STATES 1-42	25	1.08	1 25.0	10,145 4.68 475	7	10,413 475	22%	-30	+1	
553667 LYRENE MAY ROSE PRINCE.....*	0	11-14-60	526968 1762507 5-67 STUO 34-01 STATES 4-21,23,32,34	14	1.14	6 6.1	11,672 4.75 555	28	11,520 547	30%	+115	+6	
553765 .....	7		0-00 STATES 2-56,58	14	1.00	4 4.8	10,464 4.48 469	63	8,677 401	31%	+537	+20	
553856 SENRAB JOLLY LUCRATIVE.....*	25	10-29-60	543694 1644407 5-67 STUO 35-01 STATES 1-35	8	1.63	1 8.0	8,864 5.08 450	12	9,956 470	19%	-193	-2	
5539C5 GAYOSO VIEW GOLOEN FAME.....*	25	02-11-61	496783 1408844 0-00 STUO 33-03 STATES 1-91	8	1.00	3 3.2	10,533 4.77 502	29	10,974 525	23%	-59	-2	
554074 REN LO NOBLEMANS VICTOR.....	0	01-27-61	536891 1571468 5-67 STATES 1-33	13	1.15	1 13.0	10,142 4.28 434	9	10,854 462	20%	-106	-4	
554094 APPLEBROOK BONANZA COLONEL.....*	20	06-10-60	496783 1557296 5-67 STUO 21-10 STATES 5-16,21,23,31,35	56	1.27	40 1.8	9,625 5.02 483	18	10,398 489	73%	-473	0	
554184 WYNO SULTAN.....*	20	11-22-60	543941 1797865 5-67 STUO 23-11 STATES 1-23	11	1.00	9 1.3	9,961 4.70 468	23	9,545 473	34%	+157	0	
554712 WINEBERG FARMS HI FORTUNE.....*	8	03-07-60	542710 1327704 5-67 STATES 2-91,92	13	1.38	2 11.1	10,665 4.54 484	32	10,477 474	23%	+73	+3	
554731 MCDONALD FARMS J V EMINENT.....*	9	02-04-61	530291 1034863 5-67 STUO 23-09 STATES 1-23	36	1.19	29 1.3	8,652 4.83 418	14	9,371 446	65%	-450	-16	
554886 GREEN VALLEYS CICERO.....	9	07-27-60	539273 1700233 5-67 STATES 1-42	11	1.00	1 11.0	10,388 4.50 467	8	9,444 430	18%	+177	+7	
555024 LEAFY LANE OIAMONO JIM.....*	14	12-23-60	496783 1575445 5-67 STUO 35-05 STATES 4-32,35,41,42	23	1.04	15 2.2	9,369 4.89 458	14	9,592 460	50%	-88	0	
555217 EMROY BONAPARTE.....*	0	09-07-60	496783 1656152 5-67 STUO 21-10 STATES 2-21,23	10	1.10	5 3.2	10,766 4.73 509	17	10,358 498	28%	+148	+5	
555249 EBER LEA FARMS COMET.....*	0	03-10-60	496783 1531523 5-67 STATES 1-31	14	1.07	1 14.0	9,545 4.85 463	16	9,945 500	20%	-62	-5	
555567 MANOR GENIUS.....*	0	01-30-61	516284 1858580 5-67 STATES 1-51	12	1.00	2 10.1	9,707 5.06 491	76	9,313 468	20%	+84	+5	
555857 HOLLIKNOLL BOND-S ANSON.....*	15	10-11-60	446227 945721 5-67 STATES 1-52	13	1.38	1 13.0	8,263 4.80 397	13	8,735 404	21%	-106	-1	
556020 EO1STO FARMS FLASH STAR.....*	14	01-C2-61	475548 1534347 5-67 STUO 31-02 STATES 7-51,43,51,56,58	69	1.00	41 2.7	10,032 4.68 469	33	9,544 448	73%	+387	+16	
556059 WANDAMERE PRE TRUMPETER.....*	17	01-19-61	488786 1787285 5-67 STATES 2-92,93	13	1.00	2 7.4	9,707 4.88 474	36	11,502 551	25%	-389	-15	
556084 .....	17		0-00 STATES 1-52	6	1.00	1 6.0	10,817 4.80 519	51	11,432 561	15%	-56	-3	
556101 .....	0		0-00 STATES 2-56,57	8	1.00	2 6.2	9,563 4.58 443	56	9,245 420	18%	+79	+4	
556159 MULHOCAWAY BUTTERFAT OIAMONO..*	21	05-17-61	529775 1574851 5-67 STUO 23-08 STATES 1-23	42	1.00	29 1.9	9,230 4.88 450	21	9,755 467	65%	-301	-8	



REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / DAU	NO OF HEROS	EFF DAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO	AVERAGES MILK	FAT	REPEATABILITY OF SIRE SUMMARY	PRE OFF MILK	PRE OFF MILK
						MILK	%	FAT						
558634 MEADOWMARSH FLASH MASTERPIECE.* U2-C3-61 475548 963160 5-67 STUO 35-02 STATES 1-35		20	10 1.10	10	1.0	9,278	4.94	458	12	9,648	459	34%	-108	0
556793 .....* 0 STATES 1-91 0-00		0	5 1.20	1	5.0	12,408	4.70	583	27	9,798	477	14%	+382	+16
559030 OAK GROVE RUBERT.....* 20 01-18-61 541066 1783520 5-67 STATES 1-41		20	10 1.10	2	5.0	8,467	4.77	404	17	8,562	396	25%	-37	+1
559240 .....* 0 STATES 1-52 0-00		0	6 1.00	1	6.0	11,793	4.65	548	26	10,582	481	15%	+199	+11
556241 .....* 22 STATES 1-52 0-00		22	9 1.00	2	7.2	10,736	4.60	494	124	9,899	489	19%	+173	+2
559261 .....* 0 STATES 1-43 0-00		0	6 1.00	1	6.0	13,412	4.70	631	7	11,802	516	15%	+276	+18
559351 .....* 17 STATES 3-16,23,51 0-00		17	6 1.00	3	3.0	12,562	4.63	581	14	12,773	641	19%	+28	-6
559365 .....* 0 STATES 1-23 0-00		0	7 1.14	1	7.0	8,990	5.07	456	11	9,409	459	16%	-63	0
559433 GOLOEN HARVEST MIGNOT.....* 29 11-02-61 505970 1406176 0-00 STUO 21-10 STATES 1-21		29	7 1.00	5	1.5	9,751	4.45	434	12	10,646	495	25%	-182	-12
559460 HARGOODS KING PETER.....* 6 12-11-59 517753 1503023 5-67 STATES 1-23		6	16 1.06	1	16.0	12,172	4.98	606	33	11,042	555	20%	+268	+13
559485 MAURANA FINANCIERS GALIANT.....* 22 C7-C1-61 503781 1179397 0-00 STUO 35-05 STATES 3-32,35,41		22	9 1.00	9	1.0	9,198	4.61	424	19	9,706	461	31%	-139	-10
560363 MAXVALES C KING.....* 0 C2-19-61 543422 1965500 5-67 STATES 1-91		0	16 1.06	2	14.1	10,432	4.99	521	29	10,546	520	22%	+6	+2
560835 CHEOCO EDNANZAS KING.....* 0 05-03-62 496783 1883849 0-00 STUO 23-09 STATES 1-23		0	9 1.00	8	1.2	9,294	4.64	431	11	9,291	430	30%	+5	0
561031 .....* 14 STATES 1-23 0-00		14	8 1.00	1	8.0	9,401	4.95	465	33	9,545	470	16%	-16	0
561120 .....* 0 STATES 1-55 0-00		0	7 1.00	2	5.2	11,303	4.95	559	50	11,670	553	18%	-20	+3
561222 LEE RU BEAUTY GALLANT.....* 24 03-21-61 543671 1818972 5-67 STATES 1-43		24	17 1.18	1	17.0	7,550	4.52	341	47	7,865	353	21%	-93	-3
561403 .....* 0 STATES 1-43 0-00		0	8 1.25	1	8.0	7,387	4.51	333	57	7,812	350	18%	-97	-3
562476 .....* 10 STATES 1-32 0-00		10	10 1.00	1	10.0	9,313	5.11	476	8	10,391	516	18%	-168	-5

REGISTRATION				INC	DAUGHTERS	NO	EFF	DAUGHTER			ADJUSTED		REPEATABILITY		PRED		
NUMBER	NAME	OF	BULL	%	REC /	NO	DAU /	HERO'S	HERD	MILK	%	FAT	HEROMATE	AVERAGES	OF SIRE	OFF	
959314	SHAWS DAUNTLESS	AVALON.....*		0	15	4.13	13	1.2		13,250	3.75	497	7	13,041	477	52%	+92 +10
06-28-45	668530	2282483	5-67														
STATES	4-11,12,14,16																
1001748	CARNATION CEORIC	INSPIRATION..*		8	1,707	2.21	582	7.7		13,370	3.71	496	13	13,976	501	98%	-533 -3
11-24-46	933204	2422157	5-67														
STUO	31-01	STATES	20-31,32,33,74,84														
1038509	BURKGCV INKA	OE KOL.....*		2	2,219	2.51	723	7.0		14,678	3.45	507	11	13,929	492	99%	+796 +15
06-12-48	882933	2241235	5-67														
STATES	27-21,42,82,83,87																
1042139	CLOYE HILL QUINO	KING F08ES - *		4	433	2.90	222	4.8		14,039	3.48	489	11	13,828	499	95%	+245 -7
06-04-48	835633	2138797	5-67														
STUO	31-01	STATES	5-21,31,33,41,74														
1070036	PABST SIR COMET	OLIVER.....*		3	2,006	2.87	483	9.7		14,092	3.72	524	11	13,204	474	98%	+859 +48
12-06-48	559466	3073680	5-67														
STUO	35-03	STATES	32-21,23,35,42,74														
1071565	U N H DAUNTLESS	PRESIOENT.....*		3	133	2.79	54	7.4		15,179	3.66	556	11	14,517	545	82%	+639 +14
04-21-49	559314	2260016	5-67														
STATES	12-11,12,14,16,21																
1074403	HEERSCHE SMOKY	BRUMMEL - TWIN		10	407	2.16	198	3.5		12,517	3.66	458	16	12,952	470	95%	-451 -12
01-03-49	1003344	2211866	5-67														
STUO	48-01	STATES	5-47,48,73,74,85														
1090340	CAMPION HILLS SIR	TY VIC IOEAL*		2	913	3.18	457	3.8		13,823	3.69	510	12	12,767	473	98%	+975 +35
06-12-49	923749	2236383	5-67														
STUO	53-01	STATES	9-21,32,33,35,54														
1094305	GRAY VIEW PANSY	PILCT.....*		6	2,387	2.62	770	7.9		14,185	3.62	513	16	14,181	511	99%	+85 +4
08-04-49	959466	2131575	5-67														
STUO	31-01	STATES	36-11,21,31,74,84														
1112211	PABST REBURKE	OUKE.....*		4	1,892	2.83	788	7.2		15,340	3.51	539	19	14,395	515	99%	+1034 +26
07-08-50	901195	2373582	5-67														
STUO	31-01	STATES	34-13,21,23,31,74														
1115514	HICKORY CREEK PROUD	PRINCE.....*		5	1,246	2.74	994	1.6		13,565	3.40	461	14	13,335	483	99%	+225 -21
09-30-49	949159	2272641	5-67														
STUO	33-03	STATES	40-21,23,31,33,35														
1119686	SPRUCELEIGH MONOGRAM	RAG APPLE*		8	5,083	2.21	952	11.0		13,704	3.83	525	11	13,605	506	99%	+123 +21
01-09-50	010198871	010415059	5-67														
STUO	23-09	STATES	9-21,23,31,51,54														
1140217	ELMER BROOK INKA	HOMESTEAO LAO		10	149	2.48	46	7.5		12,955	3.60	467	16	13,198	476	83%	-214 -7
10-26-50	1069792	2853593	5-67														
STUO	41-25	STATES	2-42,47														
1140763	LARRIETTA BURCAR	PA8ST.....*		7	6,614	2.12	2455	4.7		14,442	3.70	534	19	14,720	525	99%	-140 +13
01-01-51	1049581	2622088	5-67														
STUO	21-10	STATES	15-13,14,16,21,23														
1142734	MEAOOW SPRINGS FOLLOW	ON LAIRO*		11	1,208	2.54	535	4.8		13,800	3.68	508	14	14,192	511	98%	-302 0
03-21-51	742938	2482700	5-67														
STUO	31-01	STATES	29-11,21,22,31,74														
1148087	ROLLING KNOT GOLOEN	STROKE...*		10	839	2.24	379	4.9		14,711	3.53	520	16	14,097	508	97%	+669 +14
01-16-51	976710	2630072	5-67														
STUO	31-01	STATES	20-15,31,58,74,84														
1160414	CLYDE HILL FAVORITE	LAO.....*		6	224	2.75	85	9.6		13,126	3.77	495	13	13,397	491	87%	-231 +4
09-30-51	813522	2450073	5-67														
STUO	32-02	STATES	11-32,33,34,43,48														
1170426	BRIGEEN GCLOEN	FOREMOST.....*		6	2,526	2.31	738	6.7		13,214	3.82	505	14	13,854	502	99%	-583 +4
01-02-52	892522	2604970	5-67														
STUO	35-02	STATES	29-11,14,16,34,35														
1174788	FRAN-WILL AOMIRL	LUCIFER.....*		13	505	2.19	162	16.5		14,671	3.56	522	25	15,004	542	91%	-152 -12
02-24-52	769170	2703929	5-67														
STUO	31-01	STATES	6-23,31,55,74,84														
1179574	CURTISS CANOY	FLASHY CURTISS..*		8	1,113	2.56	907	1.5		12,893	3.78	488	13	13,353	485	99%	-453 +3
04-12-52	1056882	2526666	5-67														
STUO	33-03	STATES	38-21,23,31,35,41														
1182359	CORNMAN'S LAUMONT	DEAN.....*		5	210	2.12	82	5.9		12,830	3.66	469	16	12,910	473	89%	-109 -4
01-27-52	769170	2939718	5-67														
STUO	63-01	STATES	2-23,63														
1182696	AT8ITH T V RAG	APPLE JIM.....*		2	1,254	2.41	564	5.0		14,262	3.72	530	16	13,414	496	98%	+837 +34
12-14-51	923749	2790993	5-67														
STUO	31-01	STATES	17-31,33,35,72,74														
118303	8 D I OEANAUGO	JIM.....*		6	172	2.00	31	13.9		14,588	3.42	499	15	13,586	473	78%	+804 +19
02-04-52	761977	3241338	5-67														
STUO	72-01	STATES	3-14,51,72														
1184891	SHAWS GOLOEN	CRETE UNA.....*		8	535	2.01	231	5.7		13,848	3.89	539	16	13,876	521	95%	+23 +20
08-31-52	892522	3037363	5-67														
STUO	21-10	STATES	7-11,12,13,14,16														
1189593	WIS SYMBOL.....*			10	1,978	1.99	831	4.8		14,149	3.42	484	17	13,918	499	99%	+284 -13
09-28-52	915940	2347083	5-67														
STUO	34-01	STATES	19-21,32,34,35,54														
1190953	LANGE RE-CHARITY.....*			1	125	2.80	26	26.8		14,494	3.64	527	17	13,752	485	65%	+504 +27
04-15-52	901195	2394985	5-67														
STUO	91-11	STATES	10-21,35,55,81,93														
1191921	HIGH MEAOOW	FARM MASTER OLEAN..		8	1,708	1.73	759	5.9		14,433	3.62	523	44	14,415	519	98%	+122 +7
C7-06-51	761977	3203892	5-67														
STUO	35-75	STATES	33-33,35,41,48,93														
1196260	PABST RAVEN	RE8E.....*		12	1,00	5	3.0			9,173	3.17	291	9	10,643	366	32%	-549 -27
12-20-52	909839	2753399	5-67														
STUO	94-01	STATES	1-94														
1200723	W V U WIN	KING ACE.....*		11	239	2.20	151	2.3		12,844	3.64	467	14	12,467	457	93%	+267 +6
02-02-53	901316	2886687															





















REGISTRATION			INC %	DAUGHTERS			NO OF HERDS	EFF DAU / HERD	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO	MILK	AVERAGES NO	REPEATABILITY OF SIRE	PRED OIFF MILK	
NUMBER	NAME	OF BULL		NO	REC /	%			MILK	%	FAT						
1324328 THCNYMA GRMSBY CAREY HEERSCHF 11-21-57 1106455 3439574 5-67 STUD 48-01 STATES 1-48			12	335	1.45	156	3.7	12,759	3.75	479	16	13,473	485	93%	-653	-5	
1324354 ARWYN SKY KING.....* 12-10-57 1244645 3695680 5-67 STUD 33-03 STATES 37-21,23,31,33,35			8	1,035	1.58	677	2.5	14,326	3.66	525	18	14,132	512	98%	+266	+15	
1324688 CHURCHDL REGAL COLLINS-CREST.* 09-29-57 1208003 3670324 5-67 STUD 35-75 STATES 2-16,21			0	21	2.76	6	12.4	16,232	3.77	612	19	16,035	593	36%	+166	+11	
1324830 GLENFTON ARGYLE.....* 01-01-58 010249530 011091003 5-67 STUD 91-13 STATES 1-93			15	77	1.05	19	10.4	14,883	3.58	533	80	16,046	581	62%	-554	-23	
1324992 FILMMORE RAVEN DESIGN.....* 07-05-57 1264447 3601430 5-67 STUD 35-02 STATES 2-13,21			4	32	2.50	9	13.5	15,535	3.58	556	9	14,917	533	43%	+334	+12	
1325923 8RDDKVIEW GDLOEN PATHFINDER...* 10-14-57 1079736 2924582 5-67 STUD 35-75 STATES 1-31				14	2.00	3	10.4	16,081	3.44	553	7	15,724	569	27%	+162	-1	
1326163 IMPERIAL SUNLEA ELUMINE TY-VIC 07-C5-58 923749 3613484 5-67 STUD 21-1C STATES 2-13,21			6	160	2.26	148	1.1	15,000	3.70	555	20	14,915	532	91%	+220	+25	
1326270 ROSAFE SIGMUND.....* 09-12-57 010249633 011016253 5-67 STUD 35-75 STATES 4-23,31,61,86				26	1.46	7	15.6	15,568	3.50	545	20	15,853	548	32%	-10	+1	
1326606 HDWVALE RAVEN JERRY.....* 05-15-58 1113350 3266194 5-67 STUD 72-01 STATES 2-13,14			18	48	1.98	20	6.6	14,226	3.83	545	16	15,015	574	62%	-388	-12	
1326679 8URKE 8 F TRIUNE PRINCE.....* 04-22-56 1050848 3789940 5-67 STUD 35-05 STATES 6-33,35,57,61,84			0	30	2.03	16	7.1	14,761	3.46	511	23	14,932	537	50%	-6	-10	
1326756 ZELDENRUST PURE GDLD.....* 01-28-58 1028260 3598539 5-67 STUD 34-01 STATES 13-21,32,34,86,92				22	1,130	1.45	521	5.1	13,410	3.67	492	17	14,323	512	98%	-796	-16
1326895 O F MODEL DRMSBY.....* 11-22-57 1267764 3705003 5-67 STUD 1-35 STATES			2	52	2.40	7	28.8	14,714	3.61	531	16	14,923	545	40%	-20	-2	
1327405 LAVACRES DICTATOR DEFIANCE - T* 06-19-58 1204163 3399594 5-67 STUD 31-C2 STATES 2-34,93			7	116	1.70	9	77.5	15,579	3.55	553	93	15,078	530	37%	+246	+10	
1327867 MAYERS RAVEN ANNA DUKE.....* 04-11-58 1293580 3712504 5-67 STUD 41-25 STATES 3-35,41,42			15	47	1.77	15	11.8	13,017	3.65	475	18	14,781	512	52%	-839	-17	
1327891 STEAOY STREAM SIR RAG APPLE... 02-26-58 1024453 2929612 5-67 STUD 1-47 STATES			0	15	1.07	2	13.1	13,670	3.70	506	8	13,640	507	22%	+13	0	
1328281 CHRISTY MONARCH.....* 06-20-58 1265747 3108978 5-67 STUD 35-C1 STATES 1-35			13	17	1.76	10	2.2	14,262	3.41	487	10	14,065	509	47%	+125	-8	
1328620 ELKHART GDLDEN CRDSS.....* 07-15-58 1277314 2748774 5-67 STUD 91-11 STATES 3-23,35,74				28	1.21	9	8.3	12,509	3.88	485	20	13,668	485	42%	-470	0	
1329588 DATS FARM GALLANT RAG APPLE...* 12-24-57 1024453 3693720 5-67 STUD 33-03 STATES 30-21,23,35,41,88			10	372	1.05	268	2.5	15,313	3.55	544	16	15,173	549	94%	+302	+1	
1329686 M V B A RDXANNE POSCH BENJAMIN 01-C2-58 1064738 3260026 5-67 STUD 41-C1 STATES 5-41,42,45,46,47			9	140	1.34	105	2.1	13,041	3.70	482	16	13,482	483	87%	-371	0	
1330362 WIS DIRECTOR.....* 07-28-58 1189593 3255088 5-67 STUD 93-10 STATES 1-93				13	1.69	5	4.6	16,502	3.24	534	40	16,413	568	34%	+133	-8	
1330597 MAVIEW SIR MAPLE PILDT.....* 08-11-58 1094305 2978190 5-67 STUD 35-75 STATES 2-21,55			6	37	1.89	16	4.0	15,475	3.72	575	21	14,799	539	61%	+500	+25	
1330701 RUSSINWOOD SULTAN.....* 08-21-58 010237756 3050302 5-67 STUD 35-05 STATES 5-33,35,41,42,57			4	50	1.64	35	2.0	12,855	3.47	446	17	13,141	480	72%	-220	-24	
1330918 8 D I PAUL BUAL OLIVER.....* 05-19-58 1087974 36865938 5-67 STUD 41-01 STATES 1-52			10	61	1.87	5	19.1	14,886	3.45	513	39	15,136	531	51%	-35	-6	
1330936 VERBONN RAVEN LAODIE..... 10-16-57 1113350 3832324 5-67 STUD 93-05 STATES 4-82,86,91,93			9	256	1.34	27	39.9	16,279	3.59	584	145	16,499	589	68%	+64	+4	
1330961 SKOKIE REGENT DUKE.....* 06-22-58 1288610 3235817 5-67 STUD 23-11 STATES 3-22,23,41			4	157	2.32	102	2.2	14,415	3.74	539	15	13,801	510	90%	+592	+28	
1330987 SKOKIE FAMOUS DUKE.....* 07-25-58 128861C 2878339 5-67 STUD 33-03 STATES 32-23,33,34,35,41			7	359	1.23	282	1.6	14,921	3.69	551	17	14,403	520	95%	+589	+32	
1331314 RDSAFE SHAMROCK GODFREY.....* 04-08-58 010158998 011097658 5-67 STUD 35-05 STATES 2-35,41			11	51	1.96	20	9.7	14,196	3.88	551	16	15,077	573	58%	-412	-7	
1331428 KING DRMSBY QS80RNDALE.....* 01-28-58 934577 2475925 5-67 STUD 33-C3 STATES 30-21,23,33,34,35			8	239	1.81	198	1.5	14,292	3.62	517	16	14,089	510	93%	+257	+9	
1331709 KYLAND PREMIER SEGIS LEADER...* 08-28-58 1262613 3672478 5-67 STUD 35-75 STATES 4-31,34,35,64			0	22	1.95	6	7.9	17,157	3.32	569	12	15,019	525	41%	+940	+20	



P E G I S T R A T I O N				INC %	D A U G H T E R S		NO OF HEROS	EFF OAU / HERO	D A U G H T E R A V E R A G E S			NO	A O U J U S T E D H E R O M A T E	A V E R A G E S	R E P E A T A B I L I T Y	P R E O F F		
NUMBER	NAME	OF	B U L L		NO	REC / OAU			M I L K	%	FAT				OF SIRE	S U M M A R Y	M I L K	FAT
1344345	SKYWAY ESTEEM SAM.....*			8	28	2.00	11	4.8	15,574	3.55	553	31	14,730	546	53%	+524	+7	
CB-10-58	1262125	4143918	5-67															
STUO 35-02	STATES	4-13,35,86,93																
1345041	DOONCROFT SPARKIE.....*			0	31	1.65	8	18.8	17,598	3.68	647	17	17,248	685	34%	+248	-5	
09-30-58	1013415	3840437	5-67															
STUO 35-02	STATES	3-22,23,50																
1345461	IVA-NAN DICTATOR EOEN.....*			7	14	2.14	1	14.0	16,967	3.48	590	15	14,840	523	24%	+544	+17	
08-04-58	1257350	2720442	5-67															
STUD 34-01	STATES	1-32																
1346850	GRISWOOD ZEUS BURKE TRIUNE....*			9	24	1.58	6	15.2	17,517	3.51	615	16	16,058	563	31%	+539	+19	
10-06-58	1024856	3677394	5-67															
STUD 51-02	STATES	1-54																
1347065	PAWNEE FARM REFLECTION SUPREME			12	215	1.28	109	3.5	14,091	3.52	496	18	14,217	513	89%	-35	-12	
10-28-58	1322381	3922899	5-67															
STUO 41-25	STATES	7-35,41,42,43,47																
1347112	ELKHART FON MARMAOUKE.....			8	45	1.67	24	3.6	15,002	3.55	533	22	14,218	501	66%	+574	+22	
01-31-59	1250992	4055581	5-67															
STUO 41-25	STATES	2-42,47																
1347368	POPLAR BEND SKOKIE SENATOR....*			9	12	1.58	1	12.0	13,776	3.48	479	11	13,386	475	21%	+82	+1	
11-13-58	1246724	3881830	5-67															
STATES	1-41																	
1347448	VERPANA FARM REGENT MARK.....*			0	18	2.17	5	7.5	15,624	3.71	579	18	16,043	586	38%	-56	+1	
11-18-58	1250772	3192525	5-67															
STUO 91-11	STATES	1-35																
1347940	WHIRLHILL KINGPIN.....*			9	866	1.72	361	4.0	15,842	3.64	576	15	14,409	525	97%	+1497	+53	
02-13-59	1104074	4227925	5-67															
STUO 23-11	STATES	4-22,23,51,54																
1348259	AIRYTOP SIR SEELEY PABST ORLC..*			5	129	2.39	120	1.1	15,603	3.56	555	20	14,737	527	90%	+900	+29	
11-13-58	1102436	3304894	5-67															
STUO 21-10	STATES	2-13,21																
1348281	PINEYHILL MAXIMILIAN.....*			9	377	1.65	180	3.9	14,169	3.85	545	20	14,487	537	94%	-192	+12	
09-11-58	1295523	3982675	5-67															
STUO 23-11	STATES	4-21,22,23,53																
1349029	RAYMAU HEAOMASTER.....*			5	69	1.46	17	11.6	16,626	3.75	623	16	15,978	600	61%	+551	+21	
03-01-59	1181068	3125930	5-67															
STUD 35-02	STATES	3-11,14,35																
1349319	8AYFIELD OWN TY NICHOLAS.....*			7	177	1.27	95	3.2	15,138	3.64	551	17	14,233	535	88%	+872	+18	
12-21-58	1148057	4108414	5-67															
STUO 21-10	STATES	5-11,12,13,14,16																
1349678	CARNATION ROYAL PROMISE.....*			3	30	2.03	4	24.4	15,302	3.62	554	7	14,901	562	30%	+168	0	
02-01-59	1305460	4291800	5-67															
STUO 41-25	STATES	2-35,42																
1349680	CARNATION ROYAL TOPMAN.....*			3	38	1.79	2	36.0	16,214	3.74	606	15	15,300	569	28%	+306	+12	
02-06-59	1305460	3406285	5-67															
STUO 91-11	STATES	1-91																
1349691	GRAYVIEW SKYHIGH.....*			14	135	1.54	10	110.4	14,978	3.45	516	158	15,692	558	32%	-151	-10	
05-06-58	1244845	3882120	5-67															
STUO 31-02	STATES	5-41,42,43,88,93																
1350190	GLENFACON RAG APPLE DESIGN LAO*			5	582	1.66	423	2.0	14,557	3.50	510	17	13,891	504	97%	+696	+7	
06-20-58	010239301	010672857	5-67															
STUO 33-03	STATES	38-21,23,35,41,42																
1350414	HEERSCHE REFLECTOR COUNT.....*			0	34	1.71	3	23.8	15,029	3.87	582	19	14,568	556	32%	+186	+10	
03-06-59	1298430	3555057	5-67															
STUO 35-75	STATES	2-43,48																
1350463	LAVACRES DAWN MERRIMAC.....*			8	20	1.60	3	14.7	14,957	3.60	539	19	14,999	543	28%	+35	0	
03-12-59	1291500	4151544	5-67															
STUO 33-03	STATES	2-23,93																
1350848	HIGH MEADOW FARM SIR GALLHAO.			5	96	1.83	89	1.1	15,777	3.43	541	18	14,923	534	86%	+864	+10	
10-22-58	929962	4290431	5-67															
STUO 21-10	STATES	4-13,16,21,23																
1352251	GLENCALE ANTHONY BARON W.....*			7	18	1.11	2	16.1	13,375	3.66	490	19	14,827	526	22%	-291	-6	
10-02-58	010254609	010713525	5-67															
STATES	1-73																	
1352270	GLAOELL BUTTER BOY ROYAL.....*			0	14	2.43	1	14.0	14,825	3.91	579	7	15,577	605	24%	-128	-2	
01-10-59	1152252	3490233	5-67															
STATES	1-23																	
1352358	ATHLONE ADMIRAL COCHISE.....			9	78	1.35	69	1.2	14,047	3.64	511	14	14,256	518	81%	-95	-2	
03-31-59	1179373	3913726	5-67															
STUO 33-03	STATES	21-21,23,33,35,41																
1352707	CARNATION ROYAL COUNT.....*			12	50	1.92	30	2.2	14,382	3.50	504	16	14,107	511	73%	+254	-2	
05-03-59	1305460	3700610	5-67															
STUO 35-05	STATES	3-33,35,41																
1352751	GRAY VIEW REFLECTOR PANSY.....*			13	25	2.16	1	25.0	14,386	3.74	538	9	14,363	543	27%	+33	0	
03-21-59	1298430	4216791	5-67															
STUO 35-21	STATES	1-41																
1352927	VALLA VISTA NETHERLAND CAREY			8	72	1.38	49	1.8	14,399	3.46	498	16	13,593	481	78%	+649	+13	
02-26-59	1106455	4425760	5-67															
STUO 48-01	STATES	2-48,71																
1352953	KEYSTONE IDEAL PIONEER			*	4	48	2.63	11	9.7	16,569	3.77	624	42	16,371	603	60%	+298	+19
12-31-58	1013415	3473274	5-67															
STUO 31-01	STATES	2-55,74																
1352967	SKOKIE MISTER DESIGN				15	206	1.29	179	1.2	13,687	3.62	496	15	14,158	511	92%	-357	-11
12-02-58	1298378	2760877	5-67															
STUO 33-03	STATES	25-21,23,32,34,41																
1352979	SKOKIE NEO BOY			0	323	1.52	130	4.6	14,825	3.54	503	20	13,697	502	92%	+517	+2	



REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO OAU	NO OF HEROS	EFF OAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO	ADJUSTED MILK AVERAGES MILK	REPEATABILITY OF SIRE SUMMARY	PRE OFF MILK FAT
						MILK	%	FAT				
1360884	COLO S U 8 GUV DESIGNER 07-28-59 10385C9 3420439 STATES 1-82	* 0 5-67	11	1.09	2 9.1	16,472	3.18	524	14	15,065	514	21% +323 +3
1361065	GLENNAFTON RAG APPLE HIGHLIGHT 02-13-59 0102393C1 010723716 STUD 35-03 STATES 9-23,33,34,35,61	* 8 5-67	398	1.58	189 3.4	13,880	3.87	537	15	14,331	518	95% -333 +21
1361535	PINEHURST ADMIRAL VICTORY 09-25-58 1211333 288C171 STUD 35-01 STATES 1-35	* 0 5-67	10	2.10	1 10.0	15,350	3.85	591	10	14,511	531	22% +212 +14
1361933	HAMER ROBURKE RAG APPLE 11-01-58 1024453 4818416 STUD 35-75 STATES 3-33,35,42	* 5 5-67	23	1.61	11 6.8	16,296	3.52	573	11	15,358	550	42% +477 +12
1362033	MAYTAG BURKGOV TY VIC 08-05-59 1038509 3761858 STUD 41-25 STATES 1-42	* 4 5-67	26	1.50	9 12.7	14,551	3.48	506	27	13,750	477	36% +298 +10
1362410	ARCHAMBAULT SOVEREIGN SYM8CL 07-20-59 1259074 4115732 STUD 33-03 STATES 3-31,32,61	* 0 5-67	17	1.41	7 3.3	15,059	3.63	546	9	15,538	562	41% -107 -3
1362491	LAVACRES OUSTY SHANE 09-03-59 1205165 3691931 STATES 1-93	* 5 5-67	22	1.45	1 22.0	16,101	3.63	585	63	16,215	597	24% +41 0
1363393	HAYSSSEN O V IMPERIAL 09-20-59 1309548 3724558 STUD 41-01 STATES 2-41,42	* 18 5-67	18	1.06	17 1.1	13,589	3.53	480	15	12,953	467	47% +282 +5
1363507	SKOCKIE CHAMPION OUKE 06-16-59 1288610 3999339 STUD 33-02 STATES 6-31,33,35,41,61	* 5 5-67	395	1.56	152 4.5	14,469	3.55	513	17	13,955	511	94% +538 +4
1364134	BURKE MAGIC SATELLITE 05-10-59 1162188 5925896 STATES 1-32	* 10 5-67	23	1.30	1 23.0	12,671	3.34	423	4	14,131	487	23% -317 -14
1364243	CORLAN FARMS IVANHOE PIONEER 09-25-59 1169870 2939718 STUD 52-01 STATES 8-11,12,13,23,55	* 6 5-67	32	1.69	15 7.0	15,412	3.67	565	27	14,775	550	51% +396 +11
1364357	HILL GIRT MERCEDES PATRICK 07-11-59 1099477 3154946 STUD 23-09 STATES 4-21,23,50,51	* 8 5-67	74	1.08	65 1.2	13,791	4.00	551	15	14,483	545	79% -454 +9
1364574	PIE8E REGAL DALE-MAR 05-31-59 1253576 4084978 STATES 1-48	* 10 5-67	33	1.30	3 25.7	13,397	3.76	504	9	13,412	484	28% -2 +6
1365056	LANGE ROYAL ROSE 06-14-59 1305460 4050151 STUD 41-25 STATES 4-42,45,46,47	* 5 5-67	48	1.77	11 19.7	15,469	3.57	552	31	13,879	519	44% +721 +16
1365141	WIS MOOSEHEART DIRECTOR 10-25-59 1292880 3373777 STUD 35-21 STATES 2-23,35	* 0 5-67	18	1.44	4 11.2	16,052	3.74	601	7	15,614	556	29% +194 +15
1365341	BURKGOV HEILO BELLE 02-09-59 1038509 3999292 STUD 41-25 STATES 1-41	* 4 5-67	27	1.56	12 3.8	15,023	3.62	544	37	12,926	475	53% +1078 +36
1365388	CARNATION IDEAL METEOR 10-24-59 1175596 2666887 STUD 91-11 STATES 1-91	* 0 5-67	28	1.57	8 6.0	13,766	3.65	503	12	14,825	523	49% -445 -7
1365401	CARNATION BUTTER BOY JUBLENT 10-01-59 1152252 4440593 STUD 33-03 STATES 25-23,33,34,35,48	* 13 5-67	131	1.07	94 2.0	13,925	3.59	500	17	14,429	524	85% -337 -16
1365878	RIVER VALLEY T N PRIVATEER 11-11-59 1264035 3089912 STUD 33-03 STATES 27-23,31,33,35,41	* 12 5-67	191	1.27	136 2.2	13,659	3.63	496	15	14,020	505	90% -264 -5
1366010	EXRANCO EL PICAOR 08-11-59 1032011 3876857 STUD 93-03 STATES 1-93	* 9 5-67	29	1.52	1 29.0	15,867	3.73	592	210	15,465	563	25% +153 +9
1366011	EXRANCO EL TORO 09-17-59 1032011 3816768 STUD 93-03 STATES 1-93	* 0 5-67	12	1.67	1 12.0	16,975	3.99	678	217	15,244	558	22% +418 +28
1366152	WHITTIER-FARMS STYLEMASTER 04-18-59 1181068 3822538 STUD 35-75 STATES 1-14	* 4 5-67	33	1.88	4 18.4	16,854	3.80	641	22	17,305	636	36% -19 +7
1366229	LOCKWAY SOVEREIGN LUCIFER LAO 12-18-58 1165012 3330455 STUD 35-02 STATES 1-23	* 0 5-67	11	1.91	1 11.0	16,797	4.09	687	90	15,429	591	22% +347 +23
1366238	EDGEMAR MAGIC FIFTY NINER 06-27-59 1138451 3899804 STATES 1-93	* 0 0-00	12	1.00	2 10.1	17,441	3.70	645	20	17,923	608	20% -4 +10
1366933	HILLSIDE SUPER8 06-20-59 1258430 3846713 STUD 51-02 STATES 1-23	* 0 5-67	28	1.71	4 19.2	15,478	3.96	613	17	13,953	511	32% +501 +33
1367006	8ENNA COUNT INKA RAVEN 10-09-59 1287319 4264075 STATES 1-42	* 33 5-67	12	1.00	1 12.0	13,974	3.41	477	2	13,617	485	19% +71 -1
1367027	MACSFARM ECHO DICK GENERAL 07-13-59 1227400 3121956 STUD 63-02 STATES 1-63	* 4 5-67	29	1.34	15 4.7	13,356	3.71	496	18	13,220	476	51% +62 +10
1367055	CARLINS HILLTOP FONO PRINCE 11-30-59 1243697 3307440 STUD 48-01 STATES 2-48,73	* 17 5-67	114	1.46	72 3.1	12,920	3.61	466	21	13,178	479	83% -229 -10
1367176	SUNNYBROOK PABST REBURKE REGAL 10-13-59 1112211 3774793 STATES 1-33	* 0 5-67	14	1.43	1 14.0	13,455	3.49	469	10	12,648	451	21% +157 +3





REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / NO DAU			NO OF HERDS	EFF OAU / HERD	DAUGHTER AVERAGES MILK % FAT			ADJUSTED HERDMATE NO	AVERAGES MILK FAT	REPEATABILITY OF SIRE SUMMARY	PRED MILK FAT	
			DAUGHTERS NO REC / NO DAU	DAUGHTERS NO DAU	DAUGHTERS NO REC / NO DAU			MILK	%	FAT					
1379708 WILSON CLOVERDALE KNOLLWOOD 03-25-60 1228915 4062C83 STATES 1-34	* 27 5-67		11	1.09	4	3.0		13,346	3.59	479	30	13,365	479	30%	-5 0
1379950 GERART PRINCE PILOT 12-29-59 1175596 3591804 STUD 42-02 STATES 2-42,73	5-67	5	57	1.07	41	2.2		13,963	3.46	483	10	13,684	494	71%	+222 -6
1380069 KEN VER NEIL WIS RIGHTE 04-18-59 1188192 3225356 STUD 48-01 STATES 2-48,73	5-67	8	124	1.87	61	2.2		12,931	3.76	486	20	12,992	467	87%	-84 +15
1380083 ROLLING KNOB MAT ARISTOCRAT C1-16-60 976710 2904186 STUD 51-C2 STATES 3-51,52,54	5-67	* 11	85	1.18	64	1.8		12,848	3.70	476	20	13,484	503	80%	-498 -19
1380339 BURKE CARNATION PROFILE 01-24-60 1169417 3238905 STATES 1-41	5-67	* 0	11	1.36	3	4.6		13,325	3.68	490	15	13,197	477	29%	+32 +3
1380371 COUNCIL ROCK AUTOCRAT 12-16-59 1113350 2464060 STUD 31-C1 STATES 2-31,84	5-67	* 19	42	1.50	28	1.9		13,900	3.56	495	20	14,490	529	68%	-325 -19
1380550 GLENFLEET RAG APPLE SELECT 09-29-59 010249530 C10869974 STUD 91-13 STATES 4-81,82,91,92	5-67	8	198	1.33	101	3.0		14,717	3.64	536	18	14,896	527	89%	-21 +12
1380636 8LAIRJAC T M ADMIRAL POSCH 04-23-59 1261063 4099214 STATES 1-74	5-67	21	15	1.07	1	15.0		12,779	3.66	468	11	12,638	459	20%	+14 +1
1380666 KCOI RAVEN BURKE 03-05-60 1113350 4192710 STATES 1-93	5-67	* 7	18	1.22	2	16.1		16,632	3.84	639	64	15,720	578	23%	+264 +16
1381020 MT JOSEPH WIS DEAN FLINT 04-30-60 1188192 4508638 STATES 1-48	5-67	* 10	10	1.40	3	4.2		15,347	3.13	480	20	15,292	514	28%	+69 -8
1381027 IDEAL FURY REFLECTOR 04-23-59 1298430 3872209 STUD 31-02 STATES 1-48	5-67	* 0	23	2.13	4	10.2		18,677	3.57	666	13	17,144	577	39%	+753 +39
1381837 ROSEMERE BUTTER 80Y PRIDE 07-20-59 1152252 3500390 STATES 1-31	5-67	* 10	12	1.67	1	12.0		14,236	3.67	523	24	14,595	539	21%	-49 -1
1381871 WOODBOURNE GOREWOOD REFLECTOR 12-06-59 1298430 4416523 STUD 91-13 STATES 1-23	5-67	* 21	23	1.43	4	17.5		14,079	3.93	554	12	14,847	553	28%	-170 +2
1381970 ELMOKA BERTRAM C5-12-60 130C481 3762751 STATES 1-41	5-67	* 15	13	1.15	2	11.1		13,726	3.66	503	26	13,889	509	22%	-23 0
1382176 ROMANDALE MAPLE 8BARON 09-06-59 C10218036 011345597 STUD 34-01 STATES 11-32,34,73,84,92	5-67	* 14	92	1.24	71	1.6		14,486	3.44	499	17	14,454	517	82%	+116 -11
1382261 SKOKIE ARCHDUKE 04-25-60 1288610 3935090 STUD 23-09 STATES 2-23,51	5-67	* 13	105	1.02	86	1.4		14,544	3.74	544	16	14,592	546	83%	+63 +3
1382363 OWEN IDEAL MAGICIAN 04-02-60 1138451 4327675 STATES 1-43	5-67	* 18	11	1.18	1	11.0		15,877	3.45	547	78	16,252	547	19%	-15 +1
1382667 GRAFTON RAVEN BURKE 04-21-60 1113350 4132832 STATES 1-31	5-67	* 0	13	1.00	1	13.0		12,933	3.19	413	28	11,418	394	19%	+251 +2
1382940 GLENFLEET RAG APPLE PRIORITY 11-29-59 010239301 C10930947 STUD 91-11 STATES 4-35,41,42,46	5-67	* 17	31	1.29	27	1.2		14,246	3.50	499	13	14,290	520	62%	+31 -10
1382958 STEWARTHAVEN REFLECTION SOV 04-24-56 010198998 01052715 STUD 93-10 STATES 4-52,82,86,93	5-67	* 6	116	1.50	14	39.3		15,689	3.54	555	70	15,475	558	50%	+214 +2
1383004 PINEYHILL MAJORITY 11-26-59 1295523 4507238 STUD 91-11 STATES 2-35,41	5-67	* 0	37	1.49	5	26.2		16,700	3.98	665	14	15,414	569	31%	+462 +32
1383028 EJLANE REPEAT ELSIE LEADER 02-06-60 1150470 4736574 STATES 1-32	0-00	* 20	20	1.05	2	16.4		11,712	3.76	440	31	13,391	492	24%	-396 -11
1383206 PUGET SOUND DON JUAN 03-08-60 1275641 4404452 STUD 35-02 STATES 3-34,35,91	5-67	* 9	33	1.00	31	1.1		13,723	3.65	501	12	14,153	525	62%	-216 -12
1383247 ECRASO GOLDEN TOPPER 01-01-60 1148687 4260473 STUD 72-01 STATES 1-31	5-67	* 13	20	1.45	2	18.1		19,449	3.52	685	11	17,172	625	24%	+646 +18
1383311 ELL8ANK ADMIRAL BURKE IDEAL 07-22-59 1013415 3472936 STUD 33-03 STATES 5-12,13,14,16,21	5-67	* 3	39	1.44	15	13.1		16,304	3.52	574	15	15,013	537	44%	+647 +19
1383380 BELFAGORE ARISTOCRAT JUPITER 09-26-59 1124780 4170900 STATES 1-21	5-67	* 0	12	1.08	2	10.1		12,342	3.33	411	24	12,207	425	21%	+4 -3
1383468 SHEFFIELD CLIMAX IMPERIAL C4-20-50 010260076 011181389 STUD 34-01 STATES 5-21,31,32,34,56	5-67	* 12	112	1.26	69	2.7		14,447	3.43	496	19	14,062	506	83%	+378 -6
1383551 ROWSDALE REFLECTION ROYAL 08-24-59 1305460 010918915 STUD 35-03 STATES 14-32,33,42,48,61	5-67	* 10	634	1.44	226	5.3		14,498	3.60	522	16	14,286	520	96%	+291 +5
1383626 SKY ROCKET BURKE 03-27-59 1291724 4245050 STUD 41-01 STATES 1-41	5-67	4	70	1.11	55	1.4		13,152	3.57	469	16	13,423	481	77%	-203 -9

REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO	REC / NO OF HEROS	EFF DAU / HERO	DAUGHTER MILK AVGES %	ADJUSTED HEROMATE NO MILK AVGES %	REPEATABILITY OF SIRE SUMMARY	PRE DIFF MILK FAT
1383655 HAYSEN O V CARLO C7-C3-60 1309948 3524940 STATES 1-35	* 15 5-67	32	1.19	4	26.3	12,819 3.28	420	42 13,525 483	26% -181 -16
1383759 MEADOWFARM DELIGHT TRANSMITTER* 06-11-60 1059819 2494802 STATES 2-35,52	4 5-67	28	1.04	7	6.9	14,075 3.55	500	35 13,709 505	43% +173 0
1383926 PAWNEE FARM REFLECTION ADMIRAL* 02-16-60 1322381 3922839 STUO 35-02 STATES 3-47,84,93	5 5-67	19	1.32	10	4.8	15,248 3.95	602	20 13,976 514	40% +534 +36
1384242 BLACK STAR ROLINDA BUTTER 80Y * 01-03-60 1152252 3838624 STATES 1-93	6 5-67	17	1.06	1	17.0	14,766 3.52	520	42 15,119 542	21% -35 -2
1384257 BEAU SEGIS UNIQUE 07-13-60 1304177 4389805 STATES 1-41	* 0 5-67	10	1.20	2	6.8	14,348 3.73	535	10 13,891 511	22% +114 +6
1384506 ROTHIANO MISTER DEAN 11-06-59 929962 3005512 STUO 21-10 STATES 1-21	12 5-67	46	1.61	42	1.1	15,231 3.53	537	21 15,220 540	73% +144 +2
1384606 DUNNCROFT MAJESTY 02-10-60 1293580 3921889 STUO 23-09 STATES 3-15,16,21	* 6 5-67	16	1.25	9	3.7	16,097 3.44	553	15 15,722 555	38% +234 +2
1384741 GUMPAS R A CHUBBY 08-20-60 1284663 3951366 STATES 1-12	* 10 0-00	10	1.00	1	10.0	12,456 3.58	446	27 11,713 411	18% +102 +5
1384916 ROMANDALE MAJESTY 10-07-59 010242131 011329722 STUO 33-C3 STATES 1-32	* 24 5-67	19	1.16	3	13.7	15,566 3.54	551	6 15,586 567	26% +52 -1
1385036 GREEN PASTURES R A MAPLE 06-C3-60 010218036 2790993 STUD 33-01 STATES 7-21,32,33,35,55	* 1 5-67	289	1.24	182	2.4	15,341 3.51	538	19 14,423 528	93% +951 +13
1385225 SKAGVALE ROYAL MONARCH 03-28-60 1305460 4457019 STUO 91-13 STATES 1-91	* 18 5-67	13	1.15	3	9.4	16,697 3.70	617	12 16,162 580	23% +190 +11
1385226 SKAGVALE ROYAL INSPIRATION 07-15-60 1305460 3880121 STATES 3-86,91,92	* 3 5-67	30	1.07	6	15.3	13,788 3.38	466	32 14,171 494	33% -99 -8
1385562 QUALITY ZEUS EOCATOR 03-15-60 922288 4029824 STUO 21-01 STATES 1-21	* 3 5-67	29	1.55	13	10.3	14,708 3.66	538	18 14,217 519	42% +240 +9
1385681 BURKE 8 F TRIUNE MOOEL 04-03-60 1326679 4165251 STUD 35-02 STATES 2-33,55	* 0 5-67	13	1.38	2	6.8	15,019 3.61	542	10 14,311 520	28% +227 +7
1385993 INGLIS SENTRY 05-18-60 1085978 4071579 STUO 21-10 STATES 3-13,21,23	2 5-67	65	1.58	61	1.1	14,790 3.76	556	19 15,004 541	79% -38 +16
1386036 ALBRECHT DISTINCTION MONARCH 07-26-59 1291724 4364234 STUO 41-01 STATES 4-41,42,45,46	4 5-67	71	1.38	56	1.7	14,005 3.56	498	14 13,502 477	78% +405 +16
1386128 EXRANCO RAG APPLE MAPLE 07-20-60 010218036 3800642 STUO 93-03 STATES 1-93	0 5-67	11	1.09	3	5.1	17,322 3.46	600	144 15,090 550	26% +628 +15
1386179 RENSINK SKYLARK HOMESTEAD 08-04-60 1302386 3678863 STATES 1-41	0 5-67	11	1.18	1	11.0	13,291 3.77	501	12 12,789 467	19% +85 +6
1386287 E M C ROCKY ROYAL 09-05-60 1305460 3220638 STATES 1-93	* 5 5-67	21	1.10	5	10.0	18,873 3.31	625	40 16,502 569	32% +851 +20
1386291 DIX HILL HYATT GOVERNOR 07-15-60 1194894 3758812 STUO 55-01 STATES 1-55	* 0 5-67	17	1.29	6	3.8	15,927 3.75	597	42 16,792 607	40% -206 +1
1386406 OEE ANN RAG APPLE MAPLE 10-20-59 010218036 4679674 STUO 91-11 STATES 14-33,34,35,41,42	* 11 5-67	337	1.28	173	3.8	14,918 3.67	547	15 14,150 515	93% +786 +32
1386545 THONYMA INSTRUCTOR 08-06-60 1181068 3417595 STUO 31-02 STATES 3-31,55,56	* 28 5-67	29	1.07	23	1.6	14,198 3.64	517	25 15,490 563	58% -620 -21
1386817 HOKELAND BUTTER 80Y KING 07-12-60 1152252 4023556 STATES 1-32	* 5 5-67	21	1.43	2	10.7	12,148 3.55	431	42 13,477 455	33% -431 -8
1386858 CLANYARD ADMIRAL JIM BEY 09-05-60 1152351 2827868 STUO 33-01 STATES 3-33,52,86	* 0 5-67	56	1.13	49	1.2	14,184 3.60	510	18 14,154 522	74% +81 -5
1386859 CLANYARD RAG APPLE TRI-VIC 09-19-60 1182696 3756059 STUO 33-01 STATES 3-33,35,64	* 0 5-67	42	1.31	33	1.6	14,790 3.64	538	22 13,674 508	68% +780 +22
1387057 RICHTAN LAD MOSE 05-11-60 1196645 4393196 STATES 1-43	* 0 5-67	15	1.20	1	15.0	14,705 3.46	509	16 13,846 501	21% +188 +2
1387155 CHEERYLANES ARISTOCRAT 08-22-60 1124780 4205396 STATES 1-91	0 5-67	19	1.21	1	19.0	14,570 4.06	592	11 15,415 589	22% -138 +3
1387634 WILLOWDALE PRINCE CRITERION 09-24-60 1336659 3769585 STATES 1-82	0 5-67	13	1.08	2	11.1	15,487 3.47	538	8 15,904 556	21% -33 -1
1387834 OIAMONO S SIR CANVAR 8VAR 11-13-59 1240549 3922357 STUO 91-13 STATES 1-93	* 5 5-67	22	1.55	4	10.0	16,494 3.65	602	101 16,227 595	36% +198 +6

REGISTRATION				INC %	DAUGHTERS		NO OF HEROS	EFF DAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO	AVERAGES MILK	REPEATABILITY OF SIRE	PRE DIFF MILK
NUMBER	NAME	OF	BULL		NO	REC / DAU			MILK	%	FAT				
1388256 KYLANO GALLANT COUNT 12-16-59 1265166 3282597 STUO 91-11 STATES 2-33,35		*	5	5-67	23	1.65	5	11.7	15,920	3.93	625	17	15,587	574	35% +193 +21
1388295 ELM-BECCA LAUREL IVAN 07-10-60 1189870 3586734 STUO 91-11 STATES 2-23,51		*	0	5-67	12	1.17	4	7.0	13,912	3.54	493	11	13,193	480	25% +176 +3
1388325 HALMARK PIRATE 08-08-60 1340059 4338784 STUO 91-11 STATES 1-41		0		5-67	10	1.00	9	1.2	12,216	3.48	425	12	12,586	449	33% -145 -8
1388577 BAILANO BURKE HEILO BOY 07-30-60 1090981 3365081 STUO 91-13 STATES 3-81,82,91		2		5-67	49	1.14	37	1.6	14,531	3.38	491	15	14,344	515	70% +201 -14
1388721 LAVACRES DUSTY MERRIT 09-26-60 1205185 4151544 STUO 35-75 STATES 1-48		*	9	5-67	44	1.39	5	36.4	15,616	3.80	593	34	13,912	522	29% +501 +21
1388747 KYLANO PREMIER CAPTAIN-TWIN 08-29-60 1126392 3359684 STUO 91-11 STATES 1-41		*	18	5-67	11	1.18	3	7.5	17,425	3.44	600	10	17,146	600	23% +151 +3
1388790 RAVEN AG8 IDEAL BLACKIE 03-01-60 1113350 2604550 STUO 23-11 STATES 1-22		*	14	5-67	36	1.14	23	2.0	14,909	3.55	530	32	15,069	556	62% +7 -11
1388896 PENSTATE BUTTER BOY 05-15-60 1152252 3275562 STUO 23-09 STATES 4-22,23,50,51		*	12	5-67	228	1.64	170	1.7	13,457	4.04	543	16	14,192	535	93% -602 +12
1388897 WILLMONT MAGIC ANOY 10-27-60 1138451 3438087 STUO 91-11 STATES 2-34,64		*	0	5-67	14	1.14	6	3.0	15,266	3.53	539	8	14,025	497	36% +472 +16
1388982 FAIR HILL DELLA DART 08-20-60 1151349 3267041 STUO 51-02 STATES 8-31,43,51,52,54		7		5-67	135	1.09	87	2.6	14,072	3.68	518	18	13,591	503	85% +428 +14
1389269 MONARCHIAL SIGNET PAT 11-10-60 010249530 3914720 STUO 91-11 STATES 1-41		*	14	5-67	27	1.07	12	3.7	13,019	3.80	495	11	13,350	495	50% -164 0
1389355 LONGCLIFF WIS PABST 07-21-60 1144239 4361940 STUO 91-11 STATES 1-32		8		5-67	12	1.00	1	12.0	13,427	3.49	468	15	11,548	390	19% +316 +13
1389368 GLAOTIME SUNNY SERGEANT-TWIN 10-05-60 1085978 3594768 STUO 21-10 STATES 2-13,21		9		5-67	48	1.25	46	1.0	16,337	3.59	586	21	15,562	564	72% +718 +21
1389369 GLAOTIME SUNNY SEXTON-TWIN 10-05-60 1085978 3594768 STUO 21-10 STATES 3-13,21,23		*	0	5-67	52	1.35	48	1.1	15,461	3.60	556	21	15,353	548	74% +228 +10
1389471 IOEOGRAPH FOBES KENNEDY 06-12-60 1223243 4254275 STUO 21-10 STATES 11-12,13,21,23,86		*	5	5-67	163	1.02	131	1.7	16,175	3.50	566	23	15,773	571	88% +567 +3
1389525 WAKEFIELD ARISTOCRAT BUD 06-22-60 1124780 3821521 STUO 91-11 STATES 1-31		*	0	5-67	12	1.17	1	12.0	14,349	3.66	525	12	13,557	476	19% +158 +9
1389556 MASSILLON SYLVIUS MAGICIAN 05-27-60 1138451 3188256 STUO 91-11 STATES 1-31		*	17	5-67	27	1.07	4	14.3	12,682	3.52	446	53	13,506	454	32% -256 -3
1389632 LUXWOOD CARNATION MASTER 11-29-60 1305460 3367238 STUO 91-11 STATES 3-35,41,42		9		5-67	55	1.02	45	1.5	14,047	3.50	491	11	13,453	485	72% +435 +4
1389636 AL8RECHT REX WILL 11-05-60 1297169 2925648 STUO 41-01 STATES 2-41,45		10		5-67	40	1.05	36	1.3	13,143	3.55	467	16	13,111	473	65% +5 -4
1390249 CARNATION ROYAL NOBEL 09-26-60 1305460 3942039 STUO 35-05 STATES 2-33,35		*	5	5-67	41	1.54	19	3.3	14,683	3.43	503	19	14,432	518	64% +231 -7
1390505 VALLA VISTA PROUD CAREY 08-25-60 1106455 4425760 STUO 48-01 STATES 1-48		13		5-67	18	1.00	14	1.5	12,858	3.57	459	21	12,972	460	46% -68 -1
1390582 CARLINS HILLTOP FONO MAJOR 09-19-60 1243697 3428211 STUO 91-11 STATES 2-47,48		*	15	5-67	20	1.30	5	5.9	13,272	3.72	494	18	13,578	488	39% -109 +2
1390692 CHRISTY CONFIDENT 10-17-60 1141851 4471967 STUO 91-11 STATES 1-35		*	21	5-67	14	1.36	3	6.4	12,690	3.59	455	12	12,957	465	30% -92 -3
1391084 HARDEN FARMS NOEL AOJUOICATOR 09-04-60 1315498 4227551 STUO 91-11 STATES 1-21		5		5-67	25	1.00	1	25.0	14,898	3.32	494	19	16,203	540	22% -219 -8
1391173 CORLAN FARMS IVANHCE OEACON 10-26-60 1189870 2939718 STUO 48-01 STATES 1-48		9		5-67	158	1.22	85	2.7	14,227	3.49	496	17	13,717	495	87% +476 +2
1391379 SUMMIT HOME DRUMMER LAOD 09-08-60 1326835 3993532 STUO 91-11 STATES 1-22		10		5-67	10	1.00	1	10.0	11,105	4.15	461	28	11,703	461	18% -134 0
1391447 GARWOOD IVANHCE 10-20-60 1189870 4592034 STUO 91-11 STATES 4-32,33,35,42		*	0	5-67	15	1.20	13	1.4	14,362	3.45	496	12	14,111	520	43% +140 -8
1391448 GARWOOD ODEAN RAG APPLE 10-06-60 1099477 3437570 STUO 91-11 STATES 1-23		*	11	5-67	188	1.33	126	1.8	14,002	3.71	520	16	14,878	542	90% -653 -14
1391977 ROMANOALE PINEY HILL PONTIAC 11-24-59 010264804 011254853 STUO 91-11 STATES 6-15,22,23,41,93		*	4	5-67	24	1.38	9	11.0	16,868	3.46	583	24	16,492	590	35% +243 +1



REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / OAU	NO OF HEROS	EFF OAU / HERO	DAUGHTER MILK	AVERAGES %	AOJUSTED HEROMATE NO	MILK FAT	REPEATABILITY OF SIRE SUMMARY	PRE OFF MILK FAT
1395856 MAYERS DUKE MAJESTY LESTER 12-11-60 1293580 3784070 5-67 * 0	12 1.50 3 5.5 13,329 3.68 491 10 13,678 511 30% -93 -4										
1395908 SMITHOLM R LESTER 10-26-60 1298430 4052242 5-67 * 0 STUO 35-05 STATES 2-21,23	12 1.17 6 2.6 13,358 3.56 475 17 14,832 528 34% -447 -16										
1396555 SUNNYOECHE HEILO PA8ST KENNY 09-03-60 1203206 4174373 0-00 * 0 STATES 1-91	11 1.00 4 5.0 16,853 3.19 538 44 17,095 569 26% +34 -5										
1396740 ZIMMERMAN PILOT STAR SY8 08-27-60 1261857 4648404 5-67 0 STUO 35-75 STATES 1-41	19 1.37 1 19.0 19,194 3.77 724 6 16,200 613 23% +741 +28										
1396885 SKYWAY VALLA VISTA 0008LE 11-14-60 1344345 4496001 5-67 * 6 STUO 33-03 STATES 3-35,41,86	18 1.17 6 5.7 15,181 3.75 569 31 14,429 537 36% +308 +13										
1397041 HOMEWORTH SAM SEVEN 02-04-61 1343674 4771110 5-67 21 STATES 1-21	19 1.32 1 19.0 14,605 3.62 529 3 15,238 534 22% -98 0										
1397054 HARMONY CREST FANCY KING 11-12-60 1185870 4245161 5-67 * 5 STUO 35-03 STATES 2-23,51	20 1.00 7 10.1 13,442 3.75 504 43 13,735 529 30% -75 -5										
1397088 EXRANCO FONO MARKSMAN 01-20-61 010218036 3596419 5-67 0 STUO 93-03 STATES 1-93	16 1.00 1 16.0 16,741 3.73 624 223 15,503 567 20% +289 +13										
1397089 EXRANCO RAG APPLE SPARTACUS 01-28-61 010218036 4765048 5-67 0 STUO 93-03 STATES 1-93	19 1.05 1 19.0 16,604 3.62 601 223 15,158 557 21% +340 +11										
1397209 ST CROIXCC PICNEER 01-15-61 1189870 3676388 5-67 * 6 STUO 35-02 STATES 1-35	15 1.13 8 5.5 17,306 3.74 648 21 16,354 615 33% +417 +15										
1397214 OOREIGH FARMS GENERAL LUKE 02-28-61 1336838 3293543 5-67 * 0 STATES 1-21	12 1.00 3 4.1 14,000 3.58 501 20 12,960 454 29% +291 +13										
1397397 FILCO GOLOEN PONTIAC 10-04-60 1339425 4616014 5-67 * 0 STATES 3-41,42,45	14 1.14 6 6.1 14,312 3.26 467 16 12,874 454 30% +410 +3										
1397517 8RIGEEN CHIEF FLYING CLOUD 10-31-60 1189870 3862151 5-67 * 18 STUO 33-03 STATES 12-11,13,14,16,21	134 1.16 53 6.7 15,583 3.81 594 18 16,033 599 79% -144 +5										
1397561 PETERS FARM MARKSMAN IVANHOE 07-25-60 1189870 4581126 5-67 * 8 STUO 35-75 STATES 1-23	12 1.08 1 12.0 17,282 3.55 614 15 16,032 595 19% +288 +6										
1397752 ZELOENRUST ROYAL PONTIAC 08-19-60 1305460 2649438 5-67 * 10 STUO 34-01 STATES 28-21,32,34,42,51	877 1.18 446 3.5 14,158 3.41 483 19 14,738 528 97% -428 -39										
1398117 M V B A PROFILE ELLA PETE-TWIN 06-26-60 1169417 4203258 5-67 7 STUO 41-01 STATES 2-41,45	28 1.39 23 2.0 12,807 3.64 466 22 13,417 481 58% -349 -8										
1398118 M V B A WALKER KNOULLSIE WALLY 09-29-60 1136905 4011839 5-67 10 STUO 41-01 STATES 1-41	10 1.40 9 1.2 13,022 3.63 473 22 12,603 456 35% +122 +5										
1398134 CASH-MAR HEADLINER KORNOYKE 09-14-60 1333526 3845664 5-67 * 8 STATES 1-32	26 1.35 2 24.0 15,194 3.54 538 21 15,918 548 25% -115 0										
1398216 SKOKIE CHAMPION 10-09-60 1199324 3099075 5-67 * 7 STUO 33-03 STATES 13-11,21,23,35,41	41 1.02 37 1.1 14,620 3.57 522 15 14,059 513 67% +423 +8										
1398363 TYLER FARMS MOOEL INSPECTOR 01-06-61 1148993 2986016 5-67 * 14 STUO 21-10 STATES 3-11,12,13	58 1.00 50 1.3 14,214 3.74 531 17 14,105 528 74% +135 +5										
1398429 LONDON OHIO GRAN KING 01-28-61 1060490 4082339 5-67 * 16 STATES 1-31	19 1.11 2 17.1 15,565 3.61 562 35 16,854 617 23% -210 -8										
1398510 KIMVALE SEARS MASTER RICHARD 12-11-60 1085978 4345425 5-67 4 STATES 3-13,21,22	24 1.08 22 1.1 16,095 3.49 561 23 15,441 557 55% +473 +6										
1399061 M V B A WALKER POLLY ART 12-19-60 1136905 3988198 5-67 11 STUO 41-01 STATES 2-41,45	21 1.10 18 1.3 11,375 3.68 419 20 12,681 457 51% -697 -20										
1399314 A-HOPEN REFLECTOR LAO 02-12-60 1298430 3444853 5-67 STATES 1-32	17 1.24 1 17.0 15,308 3.64 557 1 14,196 515 21% +256 +10										
1399385 GRAY VIEW SKY CHIEF 08-18-60 1244845 3882120 5-67 * 11 STUO 33-03 STATES 23-21,23,33,35,41	114 1.15 94 1.6 13,049 3.69 482 17 14,185 513 85% -890 -23										
1399824 HILLTOP APOLLO IVANHOE 11-26-60 1189870 4412249 5-67 * 4 STUO 23-09 STATES 5-22,23,50,51,55	168 1.27 138 1.4 15,348 3.76 577 16 14,231 536 90% +1079 +41										
1399945 MINALOO TRIUNE TRIUMPH 02-25-61 923749 3610458 5-67 2 STATES 2-13,21	41 1.05 41 1.0 14,304 3.66 524 18 15,056 538 68% -392 -5										
1399980 WOODSIE FARM SEELEY BURKE 07-12-60 1038509 4612328 5-67 * 8 STUO 23-11 STATES 2-21,23	323 1.22 216 2.0 14,035 3.76 528 18 14,476 543 94% -308 -8										
1400242 MEOOPINE FAYNE JEWEL 04-05-61 1226459 3000904 5-67 9 STATES 1-91	11 1.00 2 9.1 12,113 3.96 480 11 14,284 559 20% -415 -13										

REGISTRATION NUMBER	NAME OF BULL	INC %	C	DAUGHTERS			NO DAU HERDS	EFF DAU / HERD	DAUGHTER AVERAGES			ADJUSTED HERDMATE NO MILK FAT			REPEATABILITY OF SIRE SUMMARY		PRED MILK FAT	
				NO	REC /	DAU			MILK	%	FAT	NO	MILK	FAT	23%	+31	+7	
1400519 8UTZRIDGE PERRY DUKE 02-20-61 1293580 4549086 STATES 1-33		0-00		10	1.00	2	5.8	14,085	3.70	521	15	14,012	488	23%	+31	+7		
1400575 GLENATON CLARION 05-18-60 010249520 011116870 STUD 35-03 STATES 3-35,61,65		* 10	5-67	49	1.37	37	1.6	15,738	3.36	529	17	14,037	512	72%	+1267	+14		
1400686 TIDY BURKE CULMINATION 11-18-59 1329249 2948519 STUD 33-03 STATES 21-21,23,35,43,48		* 12	5-67	76	1.08	65	1.5	14,963	3.38	506	17	14,531	522	78%	+430	-9		
1400915 VIGO LEADER BELLRINGER 01-04-61 915940 3597387 STATES 1-41		17	5-67	12	1.25	1	12.0	11,054	3.62	400	17	10,987	397	20%	-33	0		
1400956 SOUTHWIND CRESCENT ADMIRAL 11-03-60 1229322 3168170 STATES 1-74		* 17	5-67	12	1.08	2	10.1	13,053	3.29	429	21	14,062	475	21%	-194	-9		
1401119 TABUR LEEHOLM RAG APPLE MAPLE 09-16-60 1278342 4766861 STATES 1-74		* 20	0-00	10	1.20	1	10.0	12,379	3.43	424	19	14,003	468	19%	-289	-8		
1401503 FERNDALE PRINCE TOPPER 03-05-61 1362756 4151232 STATES 1-23		* 11	0-00	10	1.10	3	6.6	14,229	3.58	509	27	16,489	606	22%	-427	-18		
1401506 MONCONY ARISTOCRAT ASTRONAUT 02-21-61 1124780 3573C17 STUD 55-01 STATES 1-55		* 12	5-67	18	1.06	6	4.6	16,361	3.64	596	55	17,264	619	37%	-191	-3		
1401553 LEA INN PROFILE REGAL CHIPPER 04-19-61 1361460 4486661 STATES 1-42		* 8	5-67	15	1.00	3	11.4	14,236	3.85	548	15	14,676	582	23%	-69	-5		
1401694 PINEHURST ADMIRAL EARL 01-01-61 1286826 3509763 STATES 1-42		* 0	5-67	12	1.25	2	10.1	14,195	3.35	476	12	15,138	511	22%	-165	-6		
1402019 BURMA BURKE SKYLINER 03-19-61 1244845 4151114 STATES 1-41		* 11	5-67	10	1.00	3	5.4	13,039	3.73	486	14	13,913	501	23%	-189	-2		
1402113 GLENATON RAG APPLE DYNAMIC 07-12-60 010249530 C1062277D STUD 41-25 STATES 1-41		* 0	5-67	14	1.29	2	10.5	17,196	4.10	705	12	15,099	582	24%	+550	+32		
1402122 80-LAN LEADER MO 06-05-59 1188528 3194883 STATES 1-48		13	5-67	17	1.12	2	9.2	13,806	3.65	504	26	13,632	500	29%	+57	+2		
1402201 IVY LODGE INKA REFLECTION 06-17-60 010233528 010981884 STUD 23-11 STATES 1-22		9	5-67	126	1.36	69	3.1	14,424	3.63	524	29	14,500	535	84%	+32	-4		
1402574 SISSON FARMS DELLA SKYROCKET 09-16-60 1244845 3744295 STATES 1-56		* 7	5-67	14	1.14	1	14.0	16,767	3.35	561	18	15,737	546	20%	+255	+4		
1402655 S P S M INKA CHAMPION 03-02-61 1272327 3487810 STATES 1-34		* 43	5-67	14	1.00	2	12.1	10,545	3.68	388	57	11,922	433	21%	-318	-10		
1402763 GRAY VIEW SKY BOLT 11-25-60 1244845 4156554 STATES 1-35		* 9	5-67	11	1.27	1	11.0	15,968	3.78	603	16	16,860	606	20%	-105	+2		
1403153 COON TRAIL DUNLOGGIN PROFESSOR 02-09-60 1322185 3944195 STATES 2-31,57		* 15	5-67	13	1.23	3	7.0	16,241	3.23	524	46	15,952	508	27%	+148	+5		
1403284 CHAPEL BANK IMPRINT 03-21-61 1124780 4510152 STATES 1-21		* 38	5-67	17	1.00	1	17.0	12,749	3.71	473	11	14,587	520	20%	-345	-8		
1403382 ROSERDW WORTHY PLATO 03-20-60 1124780 4700313 STUD 31-01 STATES 1-31		* 11	5-67	35	1.31	25	1.6	15,179	3.91	594	17	14,117	515	64%	+727	+52		
1403574 MAYGATE DE KOL TRANSMITTER 09-30-60 1038509 3638888 STATES 1-42		* 0	5-67	10	1.20	2	8.2	14,399	3.70	533	38	12,274	429	21%	+413	+20		
1403582 SWALL FARMS ROYAL GEM 05-23-61 1305460 4156108 STATES 1-51		* 0	5-67	10	1.00	1	10.0	14,623	3.61	528	12	14,379	535	18%	+61	0		
1403692 MERIWETHER IRA ROSE-TWIN 04-03-61 1189870 3754981 STUD 21-10 STATES 2-13,21		* 6	5-67	66	1.08	57	1.3	14,917	3.69	551	21	14,949	532	76%	+97	+18		
1403693 MERIWETHER IVAN ROSE-TWIN 04-03-61 1189870 3754981 STUD 21-10 STATES 2-13,21		* 5	5-67	22	1.05	22	1.0	14,830	3.58	531	17	15,030	533	53%	-16	+1		
1403934 ESTELLEO SPERGER COMMANDO 01-26-61 1261140 4223710 STUD 41-01 STATES 1-41		21	5-67	14	1.00	9	3.1	12,189	3.67	447	38	12,534	464	35%	-148	-6		
1404007 PINEHURST SYMBOL POSCH 05-05-61 1244845 3051175 STUD 31-01 STATES 1-31		20	5-67	30	1.00	19	1.8	12,905	3.82	493	19	14,500	532	57%	-846	-19		
1404202 COLLINS-CREST BUDDY BURKE 08-03-60 1038509 4201732 STUD 21-10 STATES 3-13,21,23		* 3	5-67	78	1.38	75	1.0	16,501	3.36	554	20	14,982	533	81%	+1369	+21		
1404428 PUGET SOUND CORRELATION C1-20-61 1315253 4472478 STUD 91-13 STATES 2-82,91		14	5-67	28	1.07	22	1.5	14,010	3.67	514	18	14,859	540	57%	-398	-11		
1404687 DEE ANN ROEBUCK BARON 11-06-60 1304176 3553202 STUD 33-03 STATES 4-35,55,73,84		* 6	5-67	22	1.09	5	14.9	12,276	4.12	506	32	15,310	561	27%	-768	-12		







REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / DAU			NO OF HERDS	EFF DAU / HERD	DAUGHTER AVERAGES MILK % FAT			ADJUSTED HERDMATE NO MILK	AVERAGES OF SIRE MILK	REPEATABILITY OF SIRE SUMMARY	PRE DIFF MILK	PRE DIFF MILK	
			ND	DAU	HERDS			MILK	%	FAT						
1418795	GRAY VIEW X PREVIEWER 09-30-61 1378594 4680791 STATES 1-41	5-67	*	6	18	1.00	2	10.7	14,392	3.82	550	22	13,756	499	27%	+182 +14
1418796	GRAY VIEW X CLASSIC 10-02-61 1378594 4680792 STATES 1-21	5-67	*	0	21	1.00	2	11.0	15,937	3.83	611	15	16,645	631	30%	-112 -1
1419065	VIGO GALAXIE 10-16-61 1189870 4757614 STUD 35-21 STATES 2-35,42	0-00	*	20	10	1.00	4	5.2	15,664	3.87	606	16	16,538	613	24%	-130 +1
14192c5	LOCHLAWN FIELD MARSHAL 10-24-61 1243697 4649706 STUD 41-25 STATES 2-41,42	0-00	*	0	10	1.00	4	5.2	15,862	3.82	606	14	15,354	595	24%	+167 +5
1419528	STOWELL FARMS LDUGO BUTCH 07-29-61 1038509 2903874 STUD 21-10 STATES 2-13,21	5-67	*	6	32	1.00	31	1.0	15,908	3.51	559	20	15,451	545	62%	+410 +12
1419631	GRAY VIEW X DOUBLE CRIS D9-20-61 1378594 4216792 STUD 35-05 STATES 2-35,41	5-67	*	13	15	1.00	10	1.6	13,721	3.67	503	12	14,507	522	41%	-272 -5
1419776	WESTEDGE LEADER PRINCE 01-27-61 1320622 4094836 STATES 1-41	0-00	*	11	19	1.00	1	19.0	14,583	3.89	567	31	12,410	463	21%	+428 +21
1419839	MARDY IVANHOE LEADER 02-10-62 1189870 3043657 STUD 23-11 STATES 1-23	5-66	*	6	16	1.00	15	1.1	14,451	3.63	525	15	14,207	526	44%	+145 +1
1419922	KANZA SKYHAWK BEAU 12-17-61 1289574 3792965 STATES 1-48	0-00	*	9	11	1.00	1	11.0	13,277	3.74	496	29	13,686	524	18%	-67 -3
1419950	NORFRED INKA SUPREME-TWIN 09-14-61 010233528 3934865 STUD 33-01 STATES 1-33	5-67	0	16	1.00	13	1.3	13,944	3.69	515	15	13,831	507	43%	+69 +4	
1420215	BUDD FARM AMBASSADOR 02-22-62 1306065 3938195 STUD 23-11 STATES 2-23,55	0-00	*	17	12	1.00	11	1.1	12,433	4.13	514	14	14,365	535	37%	-678 -5
1420413	RAG APPLE ROYAL MAPLE 04-28-61 1305460 011085334 STUD 35-03 STATES 6-31,35,41,42,57	5-67	*	10	194	1.01	114	2.5	14,154	3.57	505	17	14,128	516	89%	+92 -6
1420414	GLENALFTON RAG APPLE VITALITY 05-31-61 010273925 011248434 STUD 35-03 STATES 2-35,65	5-67	*	14	100	1.00	67	2.3	13,722	3.66	502	18	14,062	509	81%	-216 -3
1420736	JON-DE IVAN 08-26-61 1189870 4013709 STATES 1-35	5-67	*	0	10	1.00	1	10.0	14,938	3.70	552	21	15,493	597	18%	-59 -5
1420766	SALUTE SUMMIT VIEW 05-24-61 1189870 011095G16 STUD 23-11 STATES 1-23	5-67	*	12	86	1.03	70	1.3	13,966	3.79	530	14	14,911	537	81%	-635 -1
1421128	MAN-D-WAR B F CRESCENT SKYWAY 11-11-61 1188731 4496001 STUD 33-02 STATES 2-33,42	2-66	0	10	1.00	9	1.2	13,224	3.73	493	15	14,254	519	33%	-306 -6	
1421153	AUBURN-U NEPTUNE PATRICK 07-29-60 910951 4825447 STATES 1-64	5-67	*	20	16	1.13	1	16.0	15,068	3.50	527	15	16,155	588	21%	-165 -9
1421631	BOND HAVEN SIGNET CHAMP 07-21-61 010249530 011234597 STATES 1-21	5-67	*	0	12	1.00	3	4.6	14,667	3.66	537	10	14,577	533	28%	+60 +2
1421870	ROSEMERE TRIUNE SENATOR 11-23-61 105D848 350D390 STUD 35-C5 STATES 3-33,35,56	5-67	*	18	22	1.00	13	2.0	14,733	3.51	517	17	14,456	527	49%	+189 -2
1421992	8ROWNS IVANHOE MAC 11-23-61 1189870 4297468 STATES 1-23	0-00	*	0	10	1.00	1	10.0	14,203	4.28	608	21	14,780	594	18%	-76 +4
1422095	WIS ROBURKE 03-28-62 1292880 3111751 STUD 23-11 STATES 1-23	0-00	*	17	12	1.00	9	1.6	12,769	3.78	483	11	14,035	515	36%	-424 -9
1422155	MAPLEYRN CHAMPION HANS 06-C5-61 1376762 4828886 STATES 1-34	5-67	18	11	1.00	2	9.1	12,730	3.87	493	16	12,977	495	20%	-56 0	
1422644	8URKE ARKEN CARNATION 03-D5-61 13D8419 4799568 STATES 1-42	5-67	*	6	16	1.19	1	16.0	13,744	3.57	490	34	13,512	503	21%	+52 -1
1423138	LUNO DALE JERRY SKYMASTER-TWIN 11-14-61 1261140 4576869 STUD 41-01 STATES 2-41,45	0-00	*	0	14	1.00	11	1.8	14,476	3.79	548	26	13,964	502	39%	+220 +18
1423680	STUROY OAK ROYAL FOBES 12-18-61 1305460 5081180 STUD 35-C5 STATES 1-35	5-67	*	13	16	1.00	10	1.8	15,032	3.36	505	13	15,040	546	42%	+67 -14
1426384	FOHON IDEAL MODEL 06-18-61 1150470 4419504 STUD 33-02 STATES 3-31,32,33	5-67	*	0	44	1.00	32	1.8	15,164	3.44	521	23	14,200	518	66%	+695 +4
1427052	MOOKDOWN OPTIMIST 12-28-61 1243697 4397687 STUD 23-D9 STATES 1-23	5-67	*	13	61	1.00	51	1.4	15,371	3.55	545	16	14,792	546	74%	+536 +4
1427615	ROMANDALE DIVIDENDO PERFORMER 08-05-61 010257174 01D956217 STUD 23-D9 STATES 2-21,23	5-67	*	5	164	1.00	121	1.8	15,990	3.48	557	19	14,531	539	88%	+1387 +20
1428634	GLENALFTON RAG APPLE HARTOG 12-05-61 010273925 010672857 STUD 31-01 STATES 1-31	5-67	*	0	11	1.00	7	1.9	15,675	3.60	565	20	15,358	557	33%	+169 +5

## HOLSTEIN

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REGISTRATION			INC %	DAUGHTERS		NO OF HEROS	EFF OAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE AVERAGES		REPEATABILITY OF SIRE		PRE-OFF MILK FAT	
NUMBER	NAME OF BULL	REC /	NO OAU	HEROS	HERO			MILK %	FAT	NO	MILK	FAT	SUMMARY	MILK	FAT	
516006 OANOV SPARKLING CORKY JESTER...* 02-25-49	492466 1626621 5-67 STATES 1-34		15	1.60	2	13.1		7,885 5.57	439	14	8,689	447	24%	-185	-2	
5301C4 TRISTRAM BASIL BARGNET.....* 05-12-50	435991 1223303 5-67 STATES 10-33,35,41,42,43	3	127	2.69	29	69.9		10,105 5.27	533	21	9,796	519	44%	+195	+7	
531074 SIGNAL OXFORD SULTAN.....* 10-30-50	419248 1287233 5-67 STUO 48-01 STATES 4-47,48,72,74	8	103	2.18	20	12.2		8,651 4.94	427	18	7,985	406	71%	+444	+8	
532850 JESTER AIMING JIM.....* 12-C9-50	507859 1712700 5-67 STATES 1-34	10	26	1.88	3	22.2		8,363 4.91	411	13	8,042	424	27%	+78	-5	
543429 BLONOE-S GOLOEN LAO JR.....* 06-02-51	496820 1487879 5-67 STUD 91-13 STATES 4-31,32,61,93	5	66	1.65	19	10.0		9,141 5.16	472	15	9,410	480	63%	-105	-5	
548159 TOREADOR BASIL TOREADOR.....* 12-04-51	504051 1665433 5-67 STATES 4-31,35,55,61	7	62	2.32	9	28.7		9,609 5.23	503	24	9,084	475	45%	+265	+11	
549122 MISTER JESTER PINN.....* 02-27-52	521974 1448741 5-67 STUO 31-01 STATES 25-31,32,33,55,74	10	789	2.00	219	18.7		8,418 5.08	428	33	8,499	428	93%	-67	-6	
551139 STANOARO VOLUNTEER CELBERT...* 12-17-52	464859 1478745 5-67 STUO 93-10 STATES 4-61,91,92,93	0	15	1.67	6	5.9		10,260 5.26	540	6	9,646	519	34%	+249	+8	
552844 SIBBLEY-S OESIGN FOUR THOUSANO...* 01-12-53	528281 1427169 5-67 STUO 21-10 STATES 11-11,12,13,14,16	7	391	1.84	145	5.3		9,512 5.05	480	12	9,295	483	94%	+285	-3	
553149 BEAUTY-S MASTER AOVANCER...* 02-22-53	534585 1732726 5-67 STUO 31-01 STATES 15-31,34,61,64,65	6	213	2.43	38	42.8		8,775 5.11	448	32	8,503	441	66%	+186	+1	
555537 JESTER-S LIBERATOR.....* 10-19-53	544382 1536863 5-67 STUO 63-02 STATES 1-63		21	2.67	5	7.7		7,554 5.23	395	16	7,963	403	42%	-189	-6	
555540 BRIGHAM CONFIDENT JUAN.....* 01-22-53	470945 1796173 5-67 STUO 93-05 STATES 1-93		451	1.47	2	449.0		10,221 5.10	521	247	10,285	530	28%	+34	-1	
556063 SABLE-S COMMANDO.....* 10-20-53	457631 1556824 5-67 STUO 34-01 STATES 14-13,14,32,34,74	15	138	1.30	52	6.7		9,323 5.67	529	23	9,216	491	80%	+150	+30	
556055 MARLU MILAOY-S SUPREME.....* 10-18-53	506147 1858269 5-67 STUO 91-13 STATES 5-81,82,88,91,92	3	571	1.92	163	8.0		9,816 5.11	502	14	9,271	490	94%	+595	+10	
557569 SURVILLE CERES PRIOE.....* 11-06-53	503523 1760788 5-67 STUO 91-13 STATES 2-92,93	3	44	2.05	6	17.4		11,754 4.93	580	19	9,565	497	45%	+1041	+37	
557682 SECRET WELCOME RELIANCE...* 12-27-53	497574 1556676 5-67 STUO 21-10 STATES 5-12,13,55,57,58	5	139	1.78	52	8.6		10,608 4.91	521	17	9,758	505	79%	+779	+13	
557868 THE PATHFINOER.....* 12-01-53	457631 1821592 5-67 STUO 31-01 STATES 26-31,33,74,82,92	10	409	1.75	164	6.9		8,423 5.06	426	19	8,793	450	93%	-308	-26	
560268 COMMANDER-S CAPER.....* 03-02-54	468937 1802181 5-67 STUO 91-13 STATES 1-93		35	1.69	12	4.9		10,220 5.04	515	22	10,061	516	57%	+185	0	
560558 FAVORITE AOVANCER SIGNAL.....* 03-15-54	493165 1868502 5-67 STUO 93-10 STATES 4-35,87,92,93	14	25	2.52	7	8.0		10,562 5.12	541	10	9,678	515	44%	+448	+12	
560800 CORALAO-S DREAM BOY.....* 04-30-53	540908 1811928 5-67 STUO 35-75 STATES 32-35,58,65,82,92	8	391	1.35	155	5.0		9,787 4.98	487	30	8,896	451	93%	+874	+29	
561487 BRIGHAM CONFIDENT KELIAN.....* 09-20-54	470945 1594635 5-67 STUO 33-03 STATES 30-13,14,21,23,32	9	151	2.07	102	2.2		8,621 5.08	438	14	8,452	431	89%	+154	0	
562315 SURVILLE HARVEST PRIOE.....* 11-09-54	503523 1760788 5-67 STUO 31-02 STATES 15-21,31,54,56,64	5	307	1.98	112	5.4		8,755 5.12	448	16	8,517	437	92%	+228	+4	
562571 SECRET WELCOME MAGICIAN.....* 01-22-55	497574 1524579 5-67 STUO 23-09 STATES 9-14,16,22,23,50	13	176	1.94	47	10.9		9,263 5.12	474	17	9,500	493	81%	-103	-15	
562967 JEAN-S ROYAL ECHO CHAR-LYNN...* 09-24-54	498154 2018617 5-67 STUO 91-13 STATES 1-93	10	43	2.28	4	30.5		10,942 5.15	563	18	10,351	525	34%	+270	+14	
563278 AOVANCERS CONTRIBUTION.....* 09-08-54	550331 1390835 5-67 STUO 51-02 STATES 8-31,42,51,54,56	9	150	2.13	66	3.9		7,692 5.16	397	12	7,467	381	87%	+113	+4	
563805 MARLU MILESTONE.....* 08-23-54	506147 1726368 5-67 STUO 33-03 STATES 33-22,23,41,63,65	5	234	1.71	93	12.2		10,341 5.24	542	33	9,764	506	84%	+597	+31	
563813 FAVORITE AOVANCERS TRISTRAM...* 02-03-55	493165 1636078 5-67 STUO 33-03 STATES 23-13,14,21,32,43	7	167	1.43	71	6.8		10,284 5.25	540	32	9,719	503	83%	+578	+31	
563955 TENN. APRIL A. E. 8. LAD.....* 12-30-54	497098 1647416 5-67 STUO 63-01 STATES 1-63	12	58	1.95	17	14.3		10,079 4.93	497	29	9,880	479	54%	+186	+9	
564125 LIBERATORS BASILEUS.....* 05-09-54	544382 1441635 5-67 STUO 33-75 STATES 33-32,55,57,58,64	11	625	1.20	216	6.7		9,046 5.04	456	27	8,876	449	95%	+205	+2	

REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS NO REC / NO DAU		NO OF HERDS	EFF DAU / HERO	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO MILK		REPEATABILITY OF SIRE SUMMARY		PRE DIFF	
			NO	DAU			MILK	%	FAT	MILK	FAT	MILK	FAT	MILK	FAT
564265 TEFFIA-S PRINCE.....* 10 01-01-55 553475 1585455 5-67 STUO 33-03 STATES 18-31,32,34,63,65		74	1.78	41	5.2	7,674	5.23	401	29	8,733	438	73%	-745	-30	
564830 R. C. O. C. BASIL WORLD RECORD* 18 02-01-55 486937 1720459 5-67 STUO 65-02 STATES 5-57,64,65,74,85		68	2.03	27	5.2	7,982	5.06	404	31	8,035	409	72%	-64	-9	
565303 BEACON GOLDEN JESTER.....* 19 05-24-54 553475 1652667 5-67 STUD 34-01 STATES 12-31,33,34,35,63		255	2.00	61	32.6	8,559	5.15	441	27	8,586	429	74%	-6	-2	
565584 FRASER JESTER BETTY OXFORD* 6 09-25-54 476453 1487748 5-67 STUO 91-13 STATES 1-93		28	2.32	9	4.9	10,562	5.04	532	26	10,355	514	54%	+215	+10	
566852 PIXY-S CHINA CUP.....* 7 05-12-55 497355 1862535 5-67 STATES 4-33,35,41,42		46	2.65	9	28.4	10,394	5.58	580	26	9,707	510	38%	+309	+27	
567009 CHAMPIONS LEADER.....* 19 04-04-55 519828 1912149 5-67 STUO 35-02 STATES 5-34,35,43,48,74		32	1.47	8	5.5	9,346	5.21	487	18	9,234	482	52%	+102	+2	
567011 ZANALUAS PRINCE.....* 12 03-23-54 010123838 010221530 5-67 STUO 35-05 STATES 3-31,32,35		42	3.00	7	26.4	8,739	5.10	446	5	8,832	444	38%	-19	0	
567846 TEFFIA SHADEL-S PRINCE DESTINY* 2 07-21-55 553475 1536916 5-67 STUO 65-02 STATES 2-63,65		69	2.70	8	18.1	7,380	4.82	356	18	7,678	367	57%	-212	-13	
568040 BASIL ROYAL PLUME HERCULES* 11 07-18-55 543376 1627533 5-67 STUO 51-02 STATES 3-31,51,54		38	2.61	11	18.2	7,907	5.21	412	15	8,667	440	41%	-301	-13	
568680 ETTA-S AMBASSADOR.....* 2 10-09-54 545211 1963101 5-67 STUO 31-01 STATES 3-23,31,65		59	2.22	23	5.0	8,651	4.94	427	16	8,406	432	70%	+171	-7	
569157 MARLU JESTER SUPREME..... 11 05-11-55 506147 1883661 5-67 STUO 87-01 STATES 4-81,82,87,91		156	2.18	57	6.4	8,439	4.93	416	10	8,667	438	85%	-170	-23	
569266 BRIGHAM VOLUNTEER MALCOM..... 5 01-15-56 470945 1786148 5-67 STUO 21-10 STATES 1-11		140	2.69	47	10.7	9,433	5.27	497	14	9,324	480	80%	+159	+12	
569336 MARLU FASHIONMAN.....* 09-20-55 506147 1726392 5-67 STUO 63-02 STATES 7-31,32,33,41,61		14	1.79	10	2.0	10,533	4.84	510	49	8,231	407	43%	+987	+41	
570419 MARSHALL VOLUNTEER.....* 8 05-28-56 533617 1801004 5-67 STUO 21-10 STATES 3-13,21,23		139	2.22	81	2.4	9,139	5.13	469	17	8,981	460	88%	+189	+4	
570421 WHITEHALL SPARKLE PILOT.....* 0 04-15-56 506147 1604255 5-67 STUO 33-02 STATES 2-33,35		174	2.16	53	6.3	8,891	4.93	458	9	8,366	429	86%	+448	+2	
571246 MILKMAN SPARKLING SUN.....* 0 05-18-56 550331 1925083 5-67 STUO 65-02 STATES 2-61,65		19	1.84	2	15.4	7,527	5.25	395	14	7,607	394	27%	-42	-2	
571382 H. L. TORONTO SECRET ORATOR* 5 04-28-56 497574 1868596 5-67 STUO 23-11 STATES 2-22,56		87	2.39	17	17.7	11,300	4.77	539	47	10,270	519	62%	+759	+14	
571446 MARLU COMMANDO CITATION.....* 13 C1-C9-56 559991 1748309 5-67 STUO 91-13 STATES 5-41,45,82,87,92		98	1.67	37	11.2	9,066	5.32	482	13	9,448	483	69%	-192	-1	
571555 RADAR PATRICIAN.....* 08-17-56 499207 1831907 5-67 STATES 3-31,55,61		26	2.27	3	22.2	9,602	5.13	493	34	9,546	506	29%	+50	-3	
571911 MARLU MILAOY FASHION PRINCE...* 10 01-01-56 506147 1726368 5-67 STUO 23-11 STATES 23-13,21,23,50,57		770	2.36	202	9.1	9,025	5.02	453	16	8,861	462	96%	+200	-11	
571913 MARLU ADVANCER SNOWMAN.....* 4 03-07-56 563805 1821569 5-67 STUO 35-75 STATES 22-35,65,74,82,87		190	1.42	72	7.9	8,733	5.30	463	30	8,887	450	84%	-88	+7	
572137 FANCY SABLE-S COMMANDO.....* 11 07-04-56 556063 1655776 5-67 STUO 52-01 STATES 5-21,52,54,55,74		107	1.61	29	6.9	9,151	5.43	497	27	9,077	466	77%	+108	+21	
572206 CHAMPION-S SENATOR.....* 6 09-15-56 519828 1636074 5-67 STUO 91-13 STATES 1-93		29	1.59	4	11.2	11,337	5.23	593	22	10,934	569	40%	+263	+12	
572375 BLONDE LINCOLN OF HILLCREST... 14 02-12-54 465966 1558974 5-67 STUO 21-10 STATES 3-12,13,58		86	1.69	43	3.5	9,027	5.47	494	22	9,395	479	78%	-211	+10	
573431 SYBIL ROYAL PROPHETOR.....* 5 03-24-56 467752 1907878 5-67 STUO 35-05 STATES 5-33,35,41,42,65		107	2.15	34	5.5	9,458	5.12	484	12	8,622	444	81%	+690	+28	
573552 MARLU PARAGON.....* 8 09-13-56 552974 2057465 5-67 STUO 52-01 STATES 2-52,55		92	1.96	15	41.4	8,282	5.34	442	23	8,427	436	45%	-63	0	
573617 BRAMPTON W. R. LERAS RAOAR...* 8 08-14-55 475948 010238975 5-67 STUO 35-75 STATES 10-12,13,57,82,87		79	2.06	25	18.4	8,328	5.25	437	21	9,085	468	58%	-398	+19	
573846 BRIGHAM VOL. KING TUT OF OGSTO* 9 08-19-56 538481 1796768 5-67 STUO 23-11 STATES 1-22		51	2.06	6	21.4	10,802	4.79	517	58	10,563	527	45%	+204	-2	
574191 L. C. STANDARD MASTER.....* 16 09-25-56 486937 1505315 5-67 STUO 35-75 STATES 9-13,21,55,58,74		48	1.94	11	24.6	9,386	4.67	438	34	9,127	438	40%	+130	-1	

REGISTRATION NUMBER	NAME	DF	BULL	INC %	DAUGHTERS NO	REC / DAU	NO DF HERDS	EFF DAU / HERD	DAUGHTER AVERAGES			ADJUSTED HERDMATE NO	AVERAGES MILK	FAT	REPEATABILITY DF SIRE SUMMARY	PRED MILK	DIFF MILK
									MILK	%	FAT						
574279	SHADEL-S DESIGN KEEPER	8	BEAUTY.*	15	14	2.29	2	12.1	8,668	5.12	444	21	8,484	436	26%	+49	0
03-18-57	568187	1499159	5-67														
STUD 41-25	STATES	1-48															
574470	SHADEWELL VICTORY LAD	.....*	0	0	47	1.68	25	3.7	10,000	5.07	507	19	9,366	485	67%	+487	+14
01-20-57	472125	1860681	5-67														
STUD 21-10	STATES	3-12,13,58															
574576	GOLDEN COMMANDO	.....*	11	0	144	1.51	59	5.5	7,689	5.15	396	33	8,510	430	83%	-671	-33
02-12-57	556092	1578755	5-67														
STUD 31-02	STATES	18-31,32,55,56,64															
574752	PATHFINDER-S PIONEER	.....*	4	0	76	1.86	24	10.8	8,985	5.02	451	34	8,971	459	65%	+45	-7
12-23-56	557868	1796086	5-67														
STUD 93-10	STATES	10-42,52,73,92,93															
574994	BRIGHAM ALCVANCER NELSON	.....*	15	0	87	2.16	51	2.4	9,208	5.10	470	20	9,241	476	82%	+41	-6
03-23-57	544480	1809498	5-67														
STUD 21-10	STATES	3-12,13,21															
575184	AM8ASSAOOR	.....*	10	0	778	1.21	219	7.8	9,048	4.97	450	27	8,794	447	95%	+279	-1
09-22-56	563805	1533673	5-67														
STUD 31-01	STATES	26-31,33,56,65,74															
576127	SECRET MARKSMAN	.....*	0	0	19	2.21	8	5.0	11,188	5.56	622	60	10,720	556	44%	+307	+31
05-22-57	497574	2029033	5-67														
STUD 35-75	STATES	7-13,14,16,42,52															
577042	BRIGHAM CONFIDENT NEVILLE	.....*	14	0	157	1.65	49	8.2	8,958	5.03	451	25	8,846	449	82%	+127	-1
05-30-57	470945	1447846	5-67														
STUD 31-02	STATES	9-31,32,52,56,58															
577134	MARLU MILADY-S CLIMAX	.....*	0	0	32	1.00	14	3.7	8,852	4.63	410	29	7,819	380	53%	+519	+10
03-12-57	506147	1726368	5-67														
STUD 72-01	STATES	7-52,55,63,65,74															
577237	CHAMPIONS DOUBLE	.....*	4	0	182	1.95	80	3.9	9,700	5.25	509	18	9,557	484	89%	+228	+21
04-17-56	519828	1823582	5-67														
STUD 91-13	STATES	4-82,87,91,92															
577388	TRUE TRAIL BLAZER	.....*	12	0	76	2.58	47	2.2	9,106	5.29	482	16	9,018	464	82%	+121	+12
05-05-57	503554	1836567	5-67														
STUD 21-10	STATES	5-13,21,23,56,74															
577474	SY8IL CARLETTA-S FINALIST	.....	8	0	52	2.25	31	2.4	10,122	5.02	508	24	9,422	480	73%	+588	+19
05-25-57	480642	1563732	5-67														
STUD 21-10	STATES	3-12,13,58															
577557	MURRAY DESIGN JEWELER COOP	....*	0	0	33	1.00	1	33.0	9,903	5.15	510	26	9,789	507	22%	+56	+1
09-23-57	525627	2019707	5-67														
STATES	1-61																
577958	ADVANCER 8ASIL LDRO	.....*	14	0	127	1.50	46	12.2	9,744	4.86	474	20	9,477	492	73%	+272	-13
12-17-56	493165	2222747	5-67														
STUD 21-10	STATES	6-11,13,16,55,74															
578146	HIGHFIELD WONDROUS STANDARD	....*	5	0	47	2.23	7	24.2	10,175	4.97	506	49	8,899	452	41%	+542	+20
08-23-57	489542	1766980	5-67														
STUD 35-75	STATES	3-56,57,58															
578382	D8SERVER SIGNAL REVIVAL	.....*	5	0	24	2.25	12	2.8	9,399	4.77	448	13	7,909	404	55%	+795	+19
12-22-56	419248	2075775	5-67														
STUD 48-01	STATES	2-47,48															
579206	MARLU SNDWRDP SUPREME	.....*	17	0	28	2.04	3	18.2	8,213	4.91	403	16	8,947	452	34%	-227	-17
12-27-57	506147	2044727	5-67														
STUD 33-03	STATES	2-55,61															
579323	CORALAO-S SPECIAL	.....*	6	0	18	1.89	3	7.7	11,921	5.23	624	21	11,620	606	36%	+223	+10
04-08-57	540908	1934331	5-67														
STATES	1-93																
580714	TRISTRAM NEVADA	.....*	10	0	53	1.74	4	22.0	11,353	5.03	571	13	10,752	522	43%	+362	+22
02-08-58	519828	1893788	5-67														
STUD 72-01	STATES	2-73,88															
580776	VALIANT SURVILLE MIKE	.....*	0	0	13	1.92	3	5.7	9,041	5.08	459	12	8,186	424	32%	+269	+9
07-29-57	537087	1759267	5-67														
STUD 91-11	STATES	2-42,43															
580836	BRIGHAM CONFIDENT ORMAND	.....*	9	0	230	2.05	64	6.0	9,244	5.18	479	15	9,011	460	89%	+261	+13
03-22-58	470945	1502800	5-67														
STUD 23-09	STATES	4-21,23,31,56															
581199	B1NDLE-S SY8IL SNDMAN	.....*	0	0	20	2.40	3	16.3	11,469	5.29	607	38	11,072	577	29%	+194	+11
11-29-57	521704	1553715	5-67														
STUD 72-01	STATES	2-12,21															
581394	PIXY-S EAGLE	.....*	0	0	13	1.92	1	13.0	11,407	4.81	549	39	10,837	577	23%	+183	-4
03-29-58	571583	1430003	5-67														
STATES	1-35																
581485	IMP. ITASKA-S FILLPAIL RULER	.....*	12	0	113	1.47	67	3.4	8,509	5.14	437	22	8,997	467	82%	-353	-26
02-17-55	010008621	010057693	5-67														
STUD 21-10	STATES	19-13,14,16,21,41															
581607	ZEPHYR-S SON OF CHAMPIONS	.....	6	0	73	1.58	39	3.6	9,911	4.91	487	21	9,556	485	75%	+354	0
06-11-58	550285	1907878	5-67														
STUD 91-13	STATES	3-85,87,92															
581840	CHAMPIONS TRISTRAM CHALLENGER	.*	21	0	44	2.32	8	28.1	8,431	5.21	439	42	8,135	434	37%	+98	0
05-05-58	519828	1657241	5-67														
STUD 93-10	STATES	3-52,92,93															
581946	MARLU MILESTONE FAVORITE	.....*	3	0	65	2.29	14	25.1	9,598	5.25	504	23	9,343	471	49%	+168	+15
03-18-58	563805	1726397	5-67														
STUD 21-10	STATES	5-13,14,21,55,56															
582190	ETTA JESTER STAR	.....*	0	0	32	2.34	8	7.8	7,965	5.20	414	13	8,255	420	52%	-157	-6
03-22-58	565141	1766360	5-67														
STUD 33-03	STATES	3-31,35,72															
582400	BET-S DREAMER OF TREOELL	.....	5	0	105	1.68	54	3.5	10,479	4.85	508	20	9,627	489	82%	+798	+15
07-05-57</																	

















REGISTRATION NUMBER	NAME	DF	BULL	INC %	DAUGHTERS NO	REC / DAU	NO DF	EFF DAU / HERD	DAUGHTER AVERAGES MILK %	DAUGHTER AVERAGES MILK %	ADJUSTED HERDMATE ND	MILK FAT	REPEATABILITY DF SIRE SUMMARY	PRED MILK DIFF	
120361 WILD EYES SEARCHLIGHT.....*	03-20-47 2338563	1892991	5-67 STATES 2-35,41	0	19	2.63	5	10.6	7,389	3.90	288	5	7,995	301	35% -254 -5
174687 GRASSY LANE GOL08AR.....*	09-17-53 112761	22064	5-67 STUD 91-11 STATES 2-42,73	0	10	2.30	6	2.2	10,841	3.55	385	8	9,105	329	35% +606 +19
176159 8ARRINGTON FIRELIGHT.....*	11-06-53 2165380	18013	5-67 STUD 34-01 STATES 1-34	0	18	3.83	1	18.0	8,714	3.39	295	6	8,472	297	28% +46 -1
181531 LILYDALE CHAMPION DUKE 3D.....*	11-10-53 8C394	11648	5-67 STUD 33-03 STATES 8-12,23,31,32,41	6	18	1.50	9	3.7	10,277	3.83	394	6	9,245	347	43% +441 +20
190014 DDAN-S RDYAL KNIGHT.....*	05-29-54 22359	2353343	5-67 STUD 34-01 STATES 3-32,34,35	11	21	2.29	7	7.5	9,671	3.71	359	6	9,998	362	41% -101 0
203661 WILLD LANE DAIRYMAN.....*	02-05-55 133185	2247564	5-67 STUD 35-75 STATES 7-13,23,32,41,42	6	54	2.26	18	15.5	10,294	3.58	369	6	9,677	360	52% +345 +5
220968 .....*	0-00 STATES 1-73	20			5	1.00	1	5.0	10,628	3.33	354	16	10,880	364	14% -10 0
225620 SALONA SEARCHLIGHT 6TH.....*	12-04-55 12038	43302	5-67 STUD 33-02 STATES 3-23,31,33	20	5	2.00	3	1.8	7,864	3.80	299	6	8,715	339	21% -192 -6
237987 LILYDALE MARTAS CHESS 7TH.....*	12-04-56 195223	199270	5-67 STUD 31-02 STATES 5-31,32,43,71,73	8	3D	2.67	8	13.9	11,294	3.47	392	11	11,008	389	41% +192 +3
240230 DARLINGTON SUN8EAM KING.....*	04-15-57 19D014	150491	5-67 STUD 34-01 STATES 3-32,34,42	22	11	1.73	6	2.4	9,762	3.77	368	12	10,071	377	36% -78 -1
240895 TDPS 8 INNISFAIL HARDY 20TH.....*	02-16-57 189693	1515	5-67 STUD 34-01 STATES 3-31,32,34	0	5	1.20	3	1.8	9,794	3.59	352	8	8,829	314	19% +178 +7
247628 THREE SPRINGS ARTHUR.....*	07-14-57 208220	11354	5-67 STUD 33-02 STATES 2-23,32	6	27	2.22	2	25.0	9,917	3.66	363	14	10,539	393	28% -134 -6
253683 ROBIN-S CINDY LOCHINVAR.....*	1D-25-56 132852	183573	5-67 STUD 35-05 STATES 2-42,63	13	34	1.85	4	19.8	10,162	3.69	375	11	9,608	353	35% +209 +6
260794 SPRING BROOK RD8IN H000.....*	12-23-58 101321	118845	5-67 STUD 33-03 STATES 2-32,33	0	11	1.91	2	9.1	12,147	3.81	463	12	11,250	424	24% +263 +11
262989 JDSEPH.....*	05-01-58 165249	64685	5-67 STATES 4-35,41,42,47	23	16	1.50	5	5.7	8,905	3.64	324	7	8,993	333	35% -37 -3
271253 TWILDO ODUBLE RD8IN H000.....*	08-01-59 38714	25780	5-67 STUD 33-03 STATES 1-31	0	10	2.10	1	10.0	9,229	3.73	344	13	8,447	317	22% +155 +5
275759 .....*	0-00 STATES 2-35,41	14			8	1.00	2	6.2	7,320	3.35	245	12	9,103	318	18% -329 -13
278101 .....*	5-67 STUD 91-11 STATES 1-35	25			8	1.25	1	8.0	9,912	3.30	327	25	9,058	322	18% +147 0
278958 GERNER FARMS LADDY.....*	02-01-60 220263	248182	5-67 STUD 35-04 STATES 2-35,41	9	11	1.18	3	7.5	7,758	3.80	295	10	8,7D2	320	23% -227 -5
283433 .....*	0-00 STATES 1-41	0			10	1.20	3	4.2	10,360	3.44	356	5	9,832	351	27% +157 +1
288548 FDXDALE PEERLESS REDCDAT.....	12-10-6D 258702	37819	5-67 STATES 1-73	22	9	1.11	2	5.0	9,843	3.30	325	8	10,278	336	23% -73 -2
289286 .....*	0-00 STATES 1-41	10			11	1.09	3	5.3	9,565	3.64	348	9	9,335	336	26% +62 +3
290074 .....*	0-00 STATES 1-42	17			6	1.00	1	6.0	10,443	3.45	360	8	9,533	330	15% +139 +4
296209 .....*	0-00 STATES 1-71	0			6	1.00	1	6.0	10,237	3.39	347	16	10,407	341	15% -6 +1

REGISTRATION NUMBER	NAME OF BULL	INC %	DAUGHTERS			NO DAU HEROS	EFF HERD	DAUGHTER AVERAGES			ADJUSTED HEROMATE NO			REPEATABILITY AVG OF SIRE SUMMARY			PRE OFF MILK FAT		
			REC /	NO DAU	DAU / HERD			MILK	%	FAT	MILK	FAT	MILK	FAT					
208 TETRA PAK 610 DANA..... 12-15-57 010024798 STUD 34-01 STATES	212 5-67 2-32,34	0	42	2.19	7 29.3	14,142	3.89	550	12	12,600	494	35%	+578	+21					
209 TETRA PAK 597 JANE..... 11-24-57 010024798 STUD 34-01 STATES	2 5-67 2-32,34	22	50	1.70	10 6.9	12,665	3.88	491	9	12,770	495	62%	+20	0					
210 TETRA PAK 619 HOJA..... 01-16-58 010026148 STUD 34-01 STATES	13 5-67 2-32,34	19	67	1.75	11 9.3	13,333	3.87	516	9	12,839	501	64%	+411	+13					
211 TETRA PAK 574 DAN..... 09-29-57 010024492 010000011 STUD 34-01 STATES	5-67 2-32,34	50	13	1.15	7 2.2	12,464	3.81	475	9	12,759	503	37%	-57	-7					

TABLE 1.--Grouping of States used in regional breed-year-season averages <sup>1/</sup>REGION  
NUMBER

STATES

GUERNSEY AND JERSEY

1 Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania

2 Indiana, Illinois, Ohio, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas

3 Delaware, Maryland, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, and Texas

4 Idaho, Wyoming, Montana, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii

HOLSTEIN

1 Maine, New Hampshire, Vermont, Massachusetts, and Rhode Island

2 Connecticut and New York

3 New Jersey and Pennsylvania

4 Indiana and Illinois

5 Ohio and Michigan

6 Wisconsin

7 Minnesota

8 Iowa and Missouri

9 North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas

10 Delaware, Maryland, and Virginia

11 Kentucky, Tennessee, North Carolina, and West Virginia

12 South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas

13 Idaho, Wyoming, Montana, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, Alaska, and Hawaii

14 California

AYRSHIRE AND BROWN SWISS

1 Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Idaho, Wyoming, Montana, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii

2 Indiana, Illinois, Ohio, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas

3 Delaware, Maryland, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, and Texas

<sup>1/</sup> Nationwide averages were used for the Milking Shorthorn, Red Dane, and Red Poll breeds because of the limited number of observations available.

TABLE 2.--Location, code numbers, and name of artificial breeding organizations in the United States

LOCATION			AI ORGANIZATION		LOCATION			AI ORGANIZATION	
STATE	STATE CODE	AI STUD CODE	NAME AND ADDRESS		STATE	STATE CODE	AI STUD CODE	NAME AND ADDRESS	
MAINE	11	01	Maine Breeding Cooperative, Inc.		VIRGINIA	52	01	*Virginia Animal Breeders Association, Inc., Rt. 4, P.O. Box 391, Rocky Mount 24151	
NEW HAMPSHIRE	12	03	New Hampshire-Vermont Breeding Assn.						
CONNECTICUT	16	04	New England Selective Breeding Association, Inc.		NORTH CAROLINA	55	01	*N.C. Institutional Breeding Association, Dept. Animal Science, N.C. State University, Raleigh 27600	
NEW YORK	21	01	New York ABC, Inc.						
NEW YORK	21	10	*Eastern Artificial Insemination Co-op., Inc., P.O. Box 518, Ithaca 14850		SOUTH CAROLINA	56	02	Chester Co-op. ABA	
NEW JERSEY	22	01	Sussex Co-op. Breeding Association, Inc.		KENTUCKY	61	01	Kentucky Artificial Breeding Association	
NEW JERSEY	22	03	New Jersey Cooperative Breeders Association, Inc.		KENTUCKY	61	02	*Select Sires, Inc., 1224 Alton-Darby Road, Columbus, Ohio 43228	
PENNSYLVANIA	23	01	*Zimmerman Dairy Farm, Rt. 2, Lehighton 18235		TENNESSEE	63	01	*East Tennessee ABA, Rt. 10, Tipton Station Road, Knoxville 37920	
PENNSYLVANIA	23	02	First Pennsylvania Artificial Breeding Cooperative		TENNESSEE	63	02	*Tennessee Artificial Breeding Association, Rt. 2, Granny White Pike, Brentwood 37027	
PENNSYLVANIA	23	04	NEPA Artificial Breeding Cooperative		TENNESSEE	63	03	*West Tennessee Artificial Breeding Association, Box 38, Yorkville 38389	
PENNSYLVANIA	23	05	Western Pennsylvania ABC						
PENNSYLVANIA	23	07	Lehigh Valley Co-op. Farmers						
PENNSYLVANIA	23	08	Southeastern Pennsylvania ABC						
PENNSYLVANIA	23	09	*Atlantic Breeders Co-op., Rt. 230 By-pass, P.O. Box 254, Lancaster 17604		MISSISSIPPI	65	02	*Miss. Animal Breeders Co-op., Drawer BA, State College 39762	
PENNSYLVANIA	23	11	*Northeastern Breeders Association, Inc., R.D. 2, Tunkhannock 18657		LOUISIANA	72	01	*Louisiana Animal Breeders Co-op., Inc., Box B.D., LSU, Baton Rouge 70803	
OHIO	31	01	Central Ohio Breeding Association		TEXAS	74	01	Texas A & M Dairy Breeding Center	
OHIO	31	02	*NOBA, Inc., Rt. 4, P.O. Box 607, Tiffin 44883		COLORADO	84	01	Colorado State University ABS	
INDIANA	32	02	John A. Newman & Sons		ARIZONA	86	02	EADS Cattle Breeding Service	
ILLINOIS	33	01	Northern Illinois Breeding Co-op.		UTAH	87	01	*Cache Valley Breeding Association, 1950 North Main, Logan 84321	
ILLINOIS	33	02	Southern Illinois Breeding Association						
ILLINOIS	33	03	*Curtiss Breeding Service, Inc., Cary 60013		WASHINGTON	91	01	Evergreen Northwest Breeders, Inc.	
MICHIGAN	34	01	*Michigan Animal Breeders Co-op., Inc., P.O. Box 511, East Lansing 48824		WASHINGTON	91	10	W. De Jongs Supreme Bull Service	
					WASHINGTON	91	11	*Carnation Farms Breeding Service Washington Unit, Carnation, Washington 98014	
WISCONSIN	35	01	Associated Breeding Service						
WISCONSIN	35	02	Badger Breeders Cooperative						
WISCONSIN	35	03	*East Central Breeders Association Co-op., 314 Beaver Dam St., P.O. Box 191, Waupun 53963						
WISCONSIN	35	04	Piper Brothers Farms, Inc.		WASHINGTON	91	13	*All West Breeders, Box 197, Burlington 98233	
WISCONSIN	35	05	*Tri-State Breeders Co-op., Westby 54667						
WISCONSIN	35	06	Southern Wisconsin Co-op. ABA		OREGON	92	01	Oregon Breeders Association	
WISCONSIN	35	21	*Midwest Breeders Co-op., P.O. Box 469, Shawano 54166		CALIFORNIA	93	01	California Dairy Breeders, Inc.	
WISCONSIN	35	75	*American Breeders Service, Inc., De Forest 53532		CALIFORNIA	93	02	*Adohr Farms Inseminating Service, Rt. 1, P.O. Box 18, Camarillo 93010	
MINNESOTA	41	01	*Minnesota Valley Breeders Association, New Prague 56071		CALIFORNIA	93	03	*Excelsior Breeding Service, 7401 Adams, Rt. 1, Box 128, Corona 91720	
MINNESOTA	41	04	Consolidated Breeders Co-op.		CALIFORNIA	93	05	*Jessup Breeders, 5471 San Fernando Road W., Glendale 91203	
MINNESOTA	41	25	Midwest Genes, Inc.		CALIFORNIA	93	10	*Pacific Breeders Co-op., Inc., 1464 Middle Two Rock Road, Petaluma 94952	
IOWA	42	02	Eastern Iowa Breeders		CALIFORNIA	93	15	*Diamond J Breeders, 9315 Dusty Lane, Modesto 95350	
IOWA	42	08	Iowa Breeders Co-op.						
MISSOURI	43	02	M. F. A. ABA						
NEBRASKA	47	01	Nebraska Dairy Breeders						
KANSAS	48	01	*Kansas ABS Unit, Anderson Hall, Kansas State University, Manhattan 66504		PUERTO RICO	94	01	*Puerto Rico Artificial Breeding Association, P.O. Box 958, Dorado 00646	
MARYLAND	51	02	*Maryland-West Virginia Bull Stud, Inc., P.O. Box 555, Frederick 21701		HAWAII	95	03	Haleakala Ranch Dairy Farm, Makawao, Maui	
					ALASKA	96	01	*Matanuska Valley Breeders Association, Palmer 99645	

\*Indicates those AI organizations reported as active.

TABLE 3.--State codes used in DHIA

11	Maine	55	North Carolina
12	New Hampshire	56	South Carolina
13	Vermont	57	Georgia
14	Massachusetts	58	Florida
15	Rhode Island	61	Kentucky
16	Connecticut	63	Tennessee
21	New York	64	Alabama
22	New Jersey	65	Mississippi
23	Pennsylvania	71	Arkansas
31	Ohio	72	Louisiana
32	Indiana	73	Oklahoma
33	Illinois	74	Texas
34	Michigan	81	Montana
35	Wisconsin	82	Idaho
41	Minnesota	83	Wyoming
42	Iowa	84	Colorado
43	Missouri	85	New Mexico
45	North Dakota	86	Arizona
46	South Dakota	87	Utah
47	Nebraska	88	Nevada
48	Kansas	91	Washington
50	Delaware	92	Oregon
51	Maryland	93	California
52	Virginia	94	Puerto Rico
54	West Virginia	95	Hawaii
		96	Alaska







